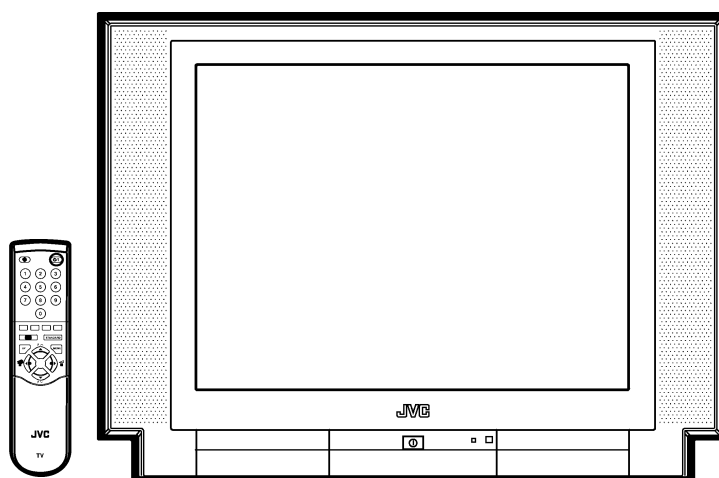


# JVC

## SERVICE MANUAL

### COLOUR TELEVISION

# AV29BF10ENS AV29BF10EPS AV29BF10EES



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AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES

# SPECIFICATIONS

ITEM		Content		
		AV 29BF10ENS	AV 29BF10EPS	AV 29BF10EES
Dimensions ( WxHxD)		78.4 × 58.2 × 49.3 cm		
Weight		46.2 kg		
TV RF System		B/G	B/G , L	B/G , D/K, K1
Colour System	TV Mode	PAL	PAL / SECAM	←
	Video Mode	PAL / NTSC 3.58 / NTSC 4.43	PAL / SECAM / NTSC 3.58 / NTSC 4.43	←
Teletext System		Fastext / Toptext		
Stereo System		German + NICAM		
Tuning System		Frequency Synthesizer Tuning System		
Number Of CH memory position		100 ch		
Receiving Frequency	VHF (VL)	46.25MHz ~ 168.25MHz		
	VHF (VH)	175.25MHz ~ 463.25MHz		
	UHF	471.25MHz ~ 863.25MHz		
	CATV	S1-S20 & S21-S41 & S75-S79	S1-S20 & S21-S41	S1-S20 & S21-S41 & S75-S77
Intermediate Frequency	VIF Carrier	38.9MHz		
	SIF Carrier	32.4MHz (6.5MHz)		
		32.9MHz (6.0MHz)		
		33.4MHz (5.5MHz)		
Colour Sub Carrier Frequency		PAL (4.43MHz), SECAM (4.43MHz), NTSC (3.58MHz/4.43MHz)		
Aerial Input Terminal		75 Ohm Unbalanced		
Power Input		AC 220 ~ 240V, 50Hz		
Power Consumption		150W(Max.) / 73W(Avg.)		
Picture Tube		29 inch measured diagonally		
High Voltage		29.5kV (in cut-off service mode)		
Speaker		( 77 ×128 mm ellipse type + Tweeter ) ×2		
Audio Output		12W + 12W		
Input ( FRONT )	Video	1Vp-p, 75 Ohm		
	Audio (L/R)	500 mVrms, High Impedance		
Output ( REAR )	Video	1 Vp-p, 75 Ohm		
	Audio (L/R)	500 mVrms, Low Impedance		
Input Terminal	Rear Side	EXT 1 (Video/Audio/RGB)		
		EXT 2 (Video/Audio/S-VHS)		
	Front Side	F AV (Video/Audio)		
Output Terminal	Front Side	Headphone jack (Stereo mini jack 3.5Ø)		
	Rear Side	EXT 1 (Video/Audio)		
		EXT 2 (Video/Audio) (Selected TV, AV 1 or AV3)		
Remote Control Unit		VE-30015781 (RM-C85) , Battery size:AAA/R03 x 2		

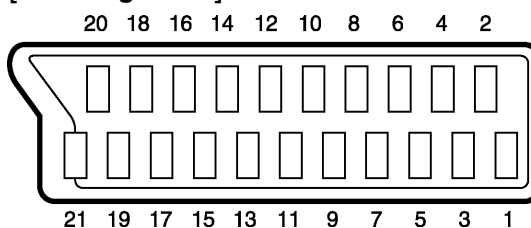
*Design & specifications are subject to change without notice.*

## ■21-pin Euro connector (SCART socket) : EXT 1 / EXT 2

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	EXT 1	EXT 2
1	AUDIO R output	500mVrms(Nominal),Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
2	AUDIO R input	500mVrms(Nominal),High impedance	○	○
3	AUDIO L output	500mVrms(Nominal),Low impedance	○ (TV OUT)	○ (TV/LINE OUT)
4	AUDIO GND		○	○
5	GND (B)		○	○
6	AUDIO L input	500mVrms(Nominal), High impedance	○	○
7	B input	700mVB-W, 75Ω	○	NC
8	FUNCTION SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	○	NC
9	GND (G)		○	○
10	-		NC	-
11	G input	700mVB-W, 75Ω	○	NC
12	-		NC	-
13	GND (R)		○	○
14	GND (YS)		○	NC
15	R / C input	R : 700mVB-W, 75Ω C : 300mVP-P, 75Ω	○ (R/C)	○ (only C)
16	Ys input	Low : 0 – 0.4, High : 1 - 3V, 75 Ω	○	NC
17	GND(VIDEO output)		○	○
18	GND(VIDEO input)		○	○
19	VIDEO output	1VS-W (Negative going sync), 75Ω	○ (TV)	○ (TV/LINE OUT)
20	VIDEO / Y input	1VS-W (Negative going sync), 75Ω	○	○
21	COMMON GND		○	○

### [Pin assignment]



# SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**  
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND, the ISOLATED(NEUTRAL) side GND and EARTH side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.  
If above note will not be kept, a fuse or any parts will be broken.
5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

## 9. Isolation Check

### (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

### (1) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.

(... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

### (2) Leakage Current Check

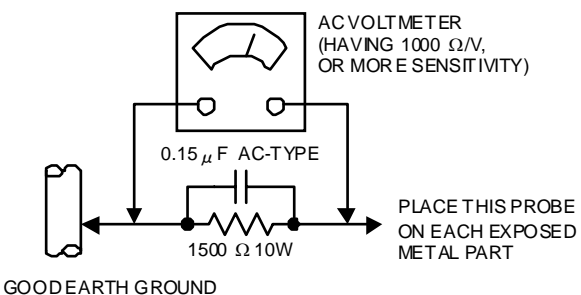
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

#### ● Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



# FEATURES

1. It is a remote controlled color television.
2. 100 programs from VHF, UHF bands or cable channels can be preset.
3. It can tune cable channels.
4. Controlling the TV is very easy by its menu driven system.
5. It has two Euroconnector sockets for external device (such as video recorder, video games, audio set, etc.)
6. Front AV Input available.
7. Stereo sound systems (German + Nicam) are available.
8. Full function Teletext (Fastext, Toptext).
9. It is possible to connect headphone.
10. Direct channel access.
11. APS (Automatic Programming System).
12. All programs can be named.
13. Forward or backward automatic tuning.
14. Automatic sound mute when no transmission.
15. 5 minutes after the broadcasting (closedown), the TV switches itself automatically to stand-by mode.

# MAIN DIFFERENCE LIST

MODEL No.		AV29BF10ENS	AV29BF10EPS	AV29BF10EES
Parts Name				
MAIN PWB		VE-20082209	VE-20083311	VE-20082155
CRT SOCKET PWB		VE-20062535	←	VE-20072781
F CARTON BOX		VE-50022390	VE-50022790	VE-50022788
INST BOOK		VE-50022402	VE-50022856	VE-50022857
TV RF system		B/G	B/G, L	B/G, D/K, K1
Colour system	TV	PAL	PAL / SECAM	←
	VIDEO	PAL NTSC 3.58 NTSC 4.43	PAL / SECAM NTSC 3.58 NTSC 4.43	←
Receiving Frequency	CATV	S01-S41 S75-S79	<b>B/G</b> : S01-S41 / S75-S79 <b>L</b> : S01-S41 / S75-S77	<b>B/G</b> : S01-S41 / S75-S79 <b>D/K</b> : S01-S41

AV29BF10ENS  
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# SPECIFIC SERVICE INSTRUCTIONS

## DISASSEMBLY PROCEDURE

### REMOVING THE REAR COVER

1. Remove the **8** screws marked **A**.
2. Remove the **4** screws marked **B**.
3. Withdraw the rear cover toward you.

### REMOVING THE MAIN PWB

- After removing the rear cover .
- 1. Draw out back and remove the MAIN PWB ASS'Y,

#### CAUTIONS)

- Be careful enough when developing a main chassis.
- The wire of a POWER TRANSFER does not separate and short-circuit with other parts.

### REMOVING THE FRONT AV + HEADPHONE JACK BOARD ASS'Y

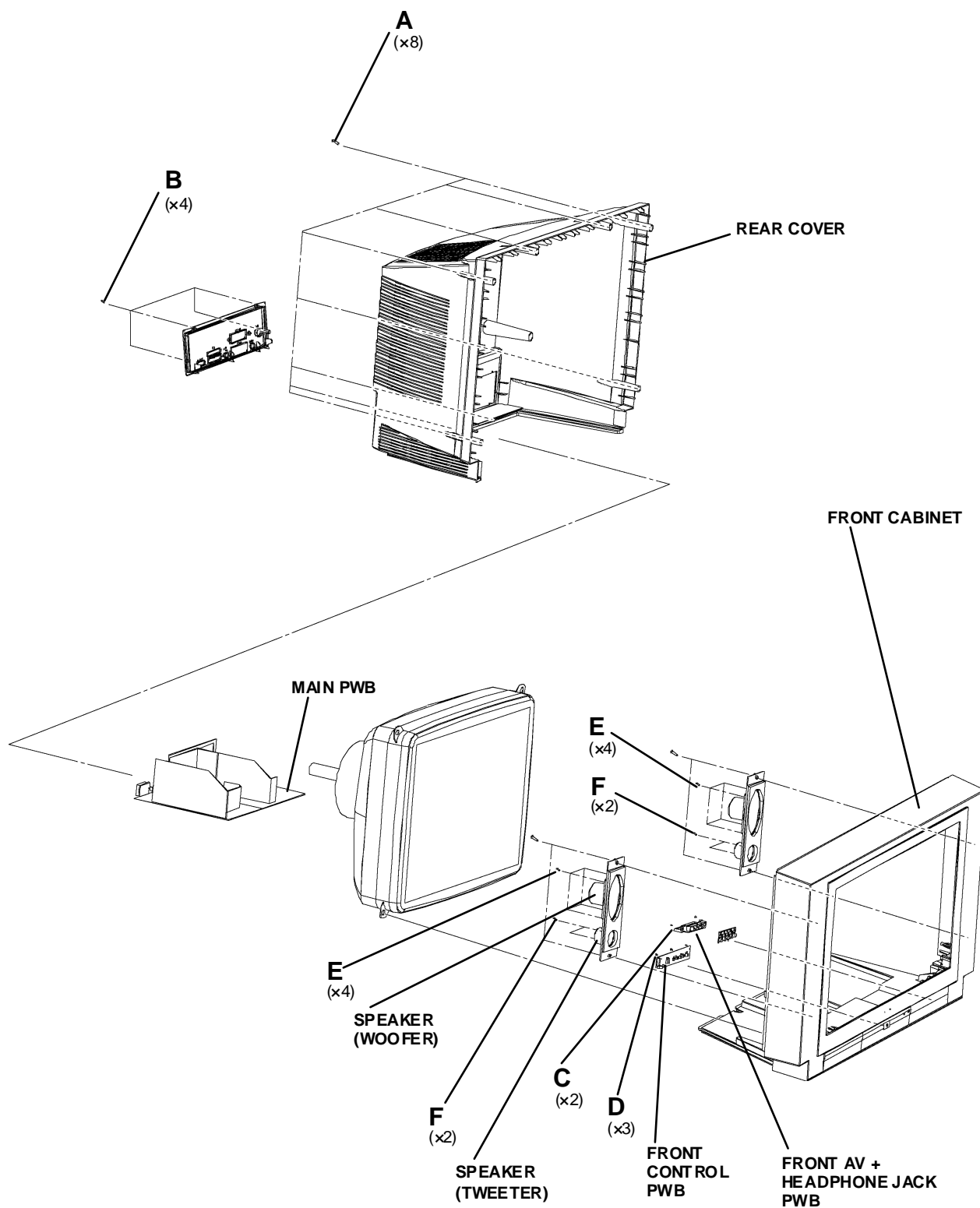
- After removing the rear cover.
- 1. Remove the **2** screws marked **C**, and remove the FRONT AV + HEADPHONE JACK BOARD ASS'Y.

### REMOVING THE FRONT CONTROL PWB

- After removing the rear cover.
- 1. Remove the MAIN PWB ASS'Y.
- 2. Remove the **3** screws marked **D**, and remove the FRONT CONTROL PWB.

### REMOVING THE SPEAKER

- After removing the rear cover.
- 1. Remove the **4** screws marked **E**, and remove the WOOFER SPEAKER.
- 2. Remove the **2** screws marked **F**, and remove the TWEETER SPEAKER.
- 3. Remove an opposite side similarly.



AV29BF10ENS  
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## SETTING OF THE LAST MEMORY FOR SHIPMENT

### ■ USER SETTING VALUES

Setting Item	Setting Value	Setting Item	Setting Value
SOUND MENU		FEATURE MENU	
BASS	CENTER	SLEEP TIMER	OFF
TREBLE	↑	CHILD LOCK	OFF
BALANCE	↑		
EFFECT	OFF		
PICTURE MENU		INSTALL → TV CONFIG. MENU	
BRIGHTNESS	These adjust are automatically restored when APS bit in Service menu is set.	LANGUAGE	ENGLISH
COLOUR		COUNTRY	?
CONTRAST		EXT-2 OUTPUT	TV
SHARPNESS	The procedure for setting APS bit is described below.		
HUE (only NTSC)			
PICTURE MODE	AUTO		

### ■ SETTING APS BIT IN SERVICE MENU

- 1) Enter service menu in TV mode by pressing "INFO" and "MUTING" keys simultaneously. Service Menu will appear.
- 2) Select OPTIONS by pressing Up/Down keys on remote control unit.
- 3) Enter OPTIONS by pressing Left/Right keys on remote control unit.
- 4) Select OPTION 8 by pressing Up/Down keys on remote control unit.
- 5) Selected bit in one OPTION is shown by blinking character. Select B2 by pressing Left/Right keys on remote control unit.  
DO NOT CHANGE ANY OTHER BIT.
- 6) Press digit key "1" to set APS bit.
- 7) Press "STANDARD" key on remote control unit to exit service mode.

# SERVICE ADJUSTMENTS

## ADJUSTMENT PREPARATION

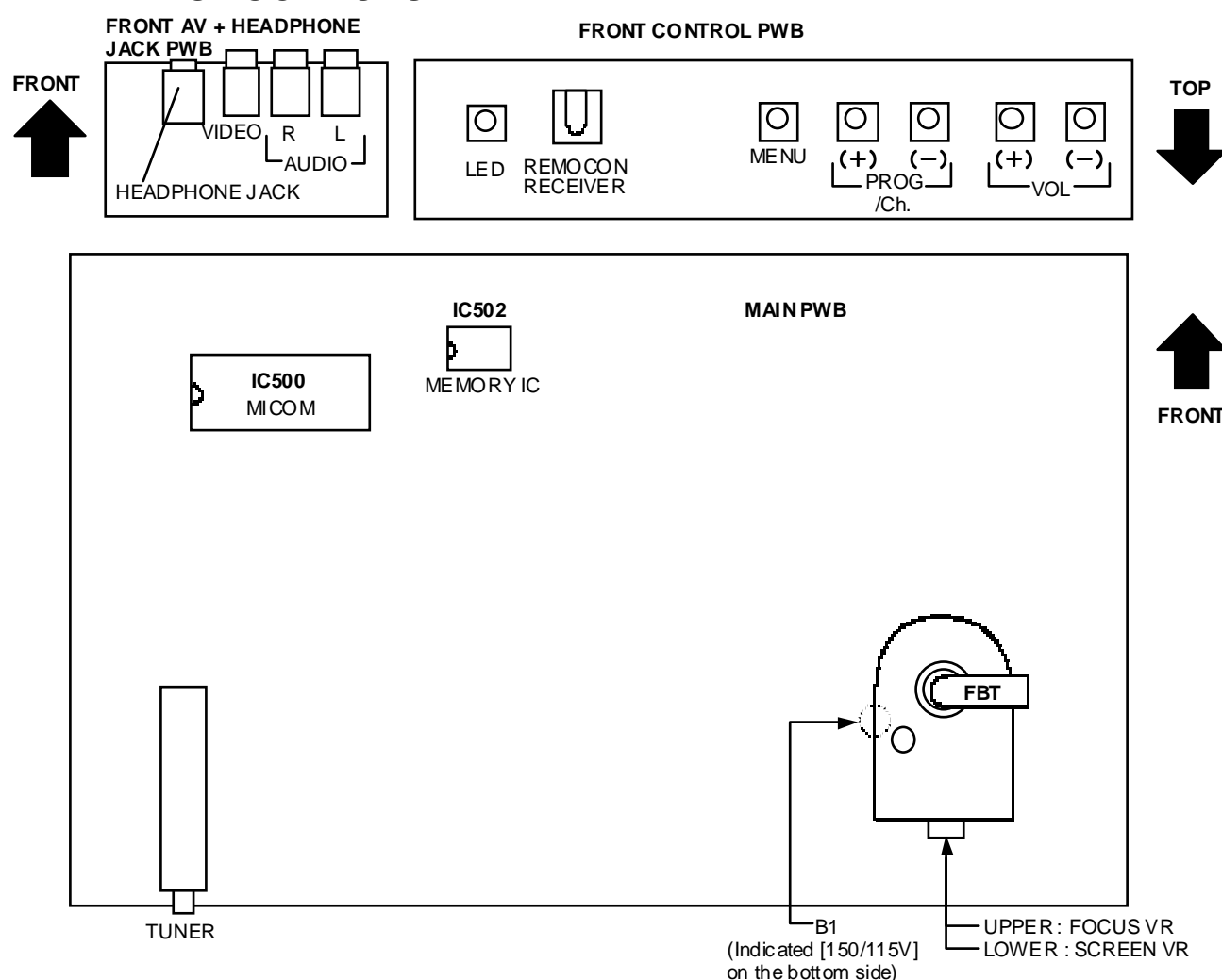
1. You can make the necessary adjustments for this unit with either the Remote Control Unit or With the adjustment tools and parts as given below.
2. Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.
3. Make sure that AC power is turned on correctly.
4. Turn on the power for set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts which are not specified in the list for this adjustment - variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.  
Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit:

VIDEO STATUS	STANDARD
TINT / COLOUR	
PICTURE/BRIGHT	CENTER
DETAIL	

## ADJUSTMENT EQUIPMENT

1. DC voltmeter (or digital voltmeter)
2. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
3. Remote control unit

## MAIN PARTS LOCATIONS



## BASIC OPERATION SERVICE MENU

### ■ HOW TO ENTER THE SERVICE MODE

- 1) Press the **INFORMATION** key and **MUTING** key of REMOTE CONTROL UNIT simultaneously.

### ■ SELECTION OF ADJUSTMENT ITEMS

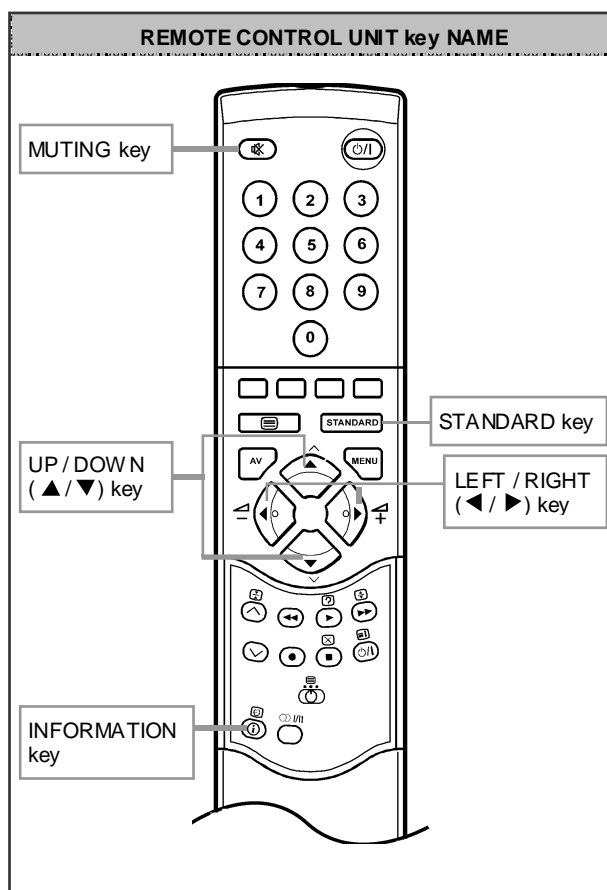
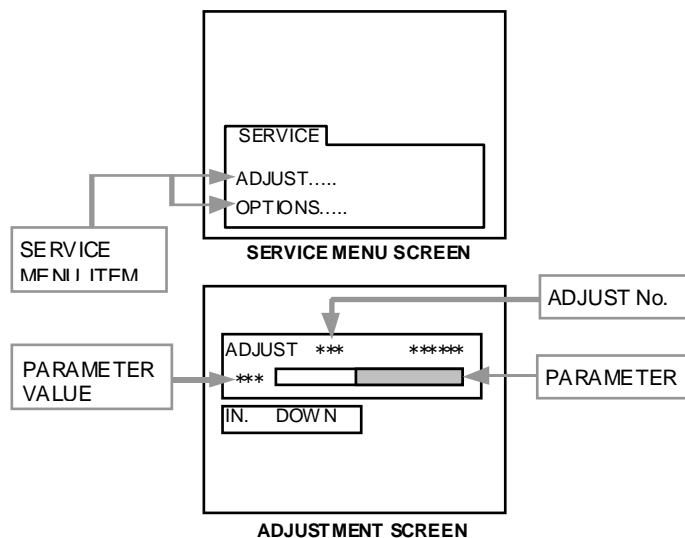
- 1) Press the **UP** (▲) or **DOWN** (▼) key and select the service menu item.
- 2) Press the **LEFT** (◀) or **RIGHT** (▶) key and enter ADJUSTMENT SCREEN.
- 3) Select the ADJUST No., use **UP** (▲) / **DOWN** (▼) key of remote control unit.
- 4) To change the selected parameter, use **LEFT** (◀) and **RIGHT** (▶) key.

### ■ HOW TO EXIT SERVICE MODE

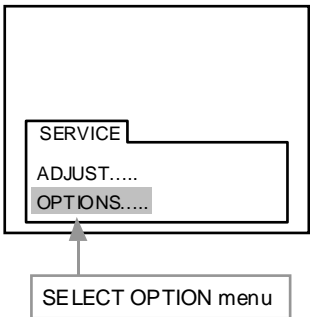
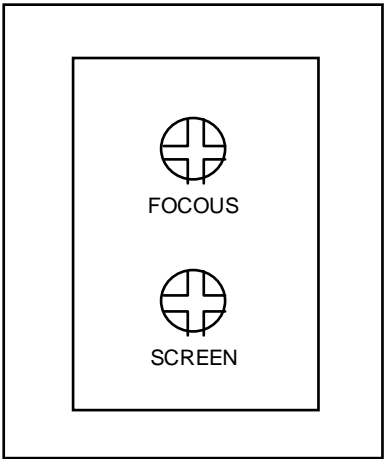
- 1) Press the **STANDARD** Key on REMOTE CONTROL UNIT.

### ■ ADJUSTMENT SERVICE MENU

ADJUSTMENT ITEM	ADJUST No.	DISCRIPTION
WHITE BALANCE	00	White Point RED
	01	White Point GREEN
	02	White Point BLUE
AGC	03	AGC
IF-PLL NEGATIVE	04	IF-PLL Negative
IF-PLL POSITIVE	05	IF-PLL Positive
LUMINANCE DELAY	06	Y-Delay PAL
	07	Y-Delay SECAM
	08	Y-Delay NTSC
VERTICAL ZOOM	10	4 : 3 PICTURE MODE
	24	16 : 9 PICTURE MODE
VERTICAL SCROLL	11	4 : 3 PICTURE MODE
	25	16 : 9 PICTURE MODE
4 : 3 HORIZONTAL SHIFT	12	4 : 3 PICTURE MODE
	26	16 : 9 PICTURE MODE
VERTICAL SLOPE	13	4 : 3 PICTURE MODE
	27	16 : 9 PICTURE MODE
VERTICAL AMPLITUDE	14	4 : 3 PICTURE MODE
	28	16 : 9 PICTURE MODE
S-CORRECTION	15	4 : 3 PICTURE MODE
	29	16 : 9 PICTURE MODE
VERTICAL SHIFT	16	4 : 3 PICTURE MODE
	30	16 : 9 PICTURE MODE
EW WIDTH	17	4 : 3 PICTURE MODE
	31	16 : 9 PICTURE MODE
EW PARABOLA WIDTH	18	4 : 3 PICTURE MODE
	32	16 : 9 PICTURE MODE
EW UPPER CORNER PARABOLA	19	4 : 3 PICTURE MODE
	33	16 : 9 PICTURE MODE
EW TRAPEZIUM	20	4 : 3 PICTURE MODE
	34	16 : 9 PICTURE MODE
HORIZONTAL PARALLELOGRAM	21	4 : 3 PICTURE MODE
	35	16 : 9 PICTURE MODE
BOW	22	4 : 3 PICTURE MODE
	36	16 : 9 PICTURE MODE
LOWER CORNER PARABOLA	23	4 : 3 PICTURE MODE
	37	16 : 9 PICTURE MODE
DO NOT ADJUST	38~88	DO NOT ADJUST



## ADJUSTMENTS

Item	Measuring instrument	Test point	Adjustment part	Description
SCREEN VOLTAGE Adjustment	Signal Generator  Remote Control unit		SCREEN VR [FBT]  OPTION 02	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> colour bar.</li> <li>2. Enter the option settings in the SERVICE MENU.</li> <li>3. Press the UP / DOWN (▲/▼) key, and Enter <b>Option 02</b>.</li> <li>4. To change bit 6, come on to it by using L / R (◀/▶) key and make it "1" by pressing "1" while bit 2 is blinking.</li> <li>5. Observe the thin horizontal blue-white line in the middle of the screen, and adjust the lower VR of the FBT, until the line is in its thinnest visible thickness.</li> <li>6. Then make Option 02 bit 6 "0", by pressing "0" on the remote control unit, although you do not see any picture.</li> </ol>
<div style="text-align: center;"> <p><b>SERVICE MENU</b></p>  <p><b>FBT</b></p>  </div>				
FOCUS Adjustment	Signal generator		FOCUS VR [FBT]	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> circle pattern.</li> <li>2. Adjust the upper VR of the FBT, until you get the Optimum focus, the sharpest picture.</li> </ol>
B1 VOLTAGE check	DC Voltmeter	Marked [150/115V] on the MAIN PWB		<ol style="list-style-type: none"> <li>1. Check whether the voltage at the point named and silk screened as "150 / 115V" on the MAIN PWB is 150V DC.</li> </ol>

Item	Measuring instruments	Test point	Adjustment part	Description
<b>WHITE BALANCE</b>	Signal generator		<b>ADJUST 00</b> (White point - RED)  <b>ADJUST 01</b> (White point - GREEN)  <b>ADJUST 02</b> (White point - BLUE)	<b>[LOW LIGHT]</b> 1. Receive a whole black signal. 2. Adjust the <Adjust 00>, <Adjust 01>, <Adjust 02>, in the SERVICE MENU so that the entire screen do not shine black.  <b>[HIGH LIGHT]</b> 1. Receive a white and black signal (colour off). 2. Adjust the <Adjust 00>, <Adjust 01>, <Adjust 02>, in the SERVICE MENU so that the whiteness in the screen become sharp.
<b>AGC Adjustment</b>	DC voltmeter		<b>ADJUST 03</b>	1. Receive a any broadcast. 2. Select < <b>ADJUST 03</b> > from SERVICE MENU 3. Connect a DC voltmeter to pin 1 of the tuner. Change the AGC parameter until you see 3.70V DC on voltmeter display.
<b>IF-PLL NEGATIVE Adjustment</b>			<b>ADJUST 04</b>	1. Select < <b>ADJUST 04</b> > from SERVICE MENU. 2. Adjustment value is set to 80 as a default value.
<b>IF-PLL POSITIVE Adjustment</b>			<b>ADJUST 05</b>	1. Select < <b>ADJUST 05</b> > from SERVICE MENU. 2. Adjustment value is set to 80 as a default value.

Item	Measuring instruments	Test point	Adjustment part	Description
LUMINANCE DELAY Adjustment	Signal generator		Adjust 06	<p>[ Y-Delay PAL ]</p> <ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> colour bar signal.</li> <li>2. Select &lt;Adjust 06&gt; from SERVICE MENU.</li> <li>3. Adjust Y-Delay PAL till the colour transients on the colour bar of the pattern become as sharper and colours between transients do not mix with each other as possible.</li> </ol> <p>Note: If the SAW filter is one of the G1965M, J1951M, K2958M, K2962M, G3957M, K6256K, K6259K or M1963M, there is constant group delay distortion, so for an equal delay of the luminance and chrominance signal the delay must be set at a value of 160nS. This means the adjustment must be set to the maximum value.</p>
			Adjust 07	<p>[ Y-Delay SECAM ]</p> <ol style="list-style-type: none"> <li>1. Receive a <b>SECAM</b> colour bars signal.</li> <li>2. Select &lt;Adjust 07&gt; from SERVICE MENU.</li> <li>3. Adjust Y-Delay SECAM till the colour transients on the colour bar of the pattern become as sharper and colours between transients do not mix with each other as possible.</li> </ol> <p>Note: If the SAW filter is one of the G1965M, K2958M, K2962M, G3957M, K6256K or K6259K, there is constant group delay distortion, so for an equal delay of the luminance and chrominance signal the delay must be set at a value of 160nS. This means the adjustment must be set to the maximum value.</p>
			Adjust 08	<p>[ Y-Delay NTSC ]</p> <ol style="list-style-type: none"> <li>1. Receive a <b>NTSC</b> colour bar signal.</li> <li>2. Select &lt;Adjust 08&gt; from SERVICE MENU.</li> <li>3. Adjust Y-Delay NTSC till the colour transients on the colour bar of the pattern become as sharper and colours between transients do not mix with each other as possible.</li> </ol> <p>Note: If the SAW filter is M1963M, there is constant group delay distortion, so for an equal delay of the luminance and chrominance signal the delay must be set at a value of 160nS. This means the adjustment must be set to the maximum value.</p>

Item	Measuring instruments	Test point	Adjustment part	Description
<b>VERTICAL ZOOM</b> Adjustment	Signal generator		Adjust 10 ( 4 : 3 )  Adjust 24 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> circle test pattern.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 10</b> &gt; from SERVICE MENU.</li> <li>4. Change vertical zoom till you see the upper and lower limit of the circle as close to the upper and lower limit of the picture tube as possible.</li> <li>5. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.</li> </ol>
<b>VERTICAL SCROLL</b> Adjustment	Signal generator		Adjust 11 ( 4 : 3 )  Adjust 25 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> circle test pattern.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 11</b> &gt; from SERVICE MENU.</li> <li>4. Change vertical scroll till you see the circle exactly in the middle of the screen.</li> <li>5. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.</li> </ol>
<b>4 : 3 HORIZONTAL SHIFT</b> Adjustment	Signal generator		Adjust 12 ( 4 : 3 )  Adjust 26 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>RED PURITY</b> test pattern.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 12</b> &gt; from SERVICE MENU.</li> <li>4. Change horizontal shift till the picture is horizontally centered. Check whether this adjustment is correct after completing Service Mode Adjustment.</li> <li>5. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.</li> </ol>
<b>VERTICAL SLOPE</b> Adjustment	Signal generator		Adjust 13 ( 4 : 3 )  Adjust 27 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>CROSS-HATCH</b> signal.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 13</b> &gt; from SERVICE MENU.</li> <li>4. Change vertical slope till the size of squares on both the upper and lower part of test pattern become equal to the squares laying on the vertical center of the test pattern.</li> <li>5. Check and readjust <b>VERTICAL SLOPE</b> item if the adjustment becomes improper after some other geometric adjustments are done.</li> <li>6. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.</li> </ol>
<b>VERTICAL AMPLITUDE</b> Adjustment	Signal generator		Adjust 14 ( 4 : 3 )  Adjust 28 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> test pattern signal.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 14</b> &gt; from SERVICE MENU.</li> <li>4. Change vertical slope till horizontal black lines on both the upper and lower part of the test pattern become very close to the upper and lower horizontal sides of picture tube and nearly about to disappear.</li> <li>5. Check and readjust <b>VERTICAL AMPLITUDE</b> item if the adjustment becomes improper after some other geometric adjustments are done.</li> <li>6. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.</li> </ol>

Item	Measuring instrument	Test point	Adjustment part	Description
S-CORRECTION Adjustment	Signal generator		Adjust 15 ( 4 : 3 )  Adjust 29 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> circle pattern signal.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 15</b> &gt; from SERVICE MENU.</li> <li>4. Change S-correction till the middle part of the circle is round as possible.</li> <li>5. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.</li> </ol>
VERTICAL SHIFT Adjustment	Signal generator		Adjust 16 ( 4 : 3 )  Adjust 30 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> test pattern signal ( or the symmetrical signal in the top and the bottom and on either side to find ).</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 16</b> &gt; from SERVICE MENU.</li> <li>4. Change Vertical Shift till the test pattern is vertically centered, i.e. horizontal line at the center pattern is in equal distance both to upper and lower side of the picture tube.</li> <li>5. Check and readjust Vertical Shift item if the adjustment becomes improper after some other geometric adjustments are done.</li> <li>6. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.</li> </ol>
EW WIDTH Adjustment	Signal generator		Adjust 17 ( 4 : 3 )  Adjust 31 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> test pattern signal.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 17</b> &gt; from SERVICE MENU.</li> <li>4. Change EW Width till the vertical black and white bars on both left and right side of the pattern exactly disappear.</li> <li>5. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>6. Adjusts with the step which is the same above from 3 to 4 about the 16 : 9 aspect mode, too.</li> </ol>
EW PARABOLA WIDTH Adjustment	Signal generator		Adjust 18 ( 4 : 3 )  Adjust 32 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> test pattern signal.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 18</b> &gt; from SERVICE MENU.</li> <li>4. Change EW Parabola Width till vertical lines close to the both sides of the picture frame become parallel to vertical side of picture tube.</li> <li>5. Check and readjust EW Parabola Width item if the adjustment becomes improper after some other geometric adjustments are done.</li> <li>6. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.</li> </ol>
EW UPPER CORNER PARABOLA Adjustment	Signal generator		Adjust 19 ( 4 : 3 )  Adjust 33 ( 16 : 9 )	<ol style="list-style-type: none"> <li>1. Receive a <b>PAL</b> test pattern signal.</li> <li>2. Set &lt; <b>4 : 3 aspect mode</b> &gt;.</li> <li>3. Select &lt; <b>ADJUST 19</b> &gt; from SERVICE MENU.</li> <li>4. Change EW Corner Parabola till vertical lines at the corners of both sides of picture frame become vertical and parallel to vertical corner sides of picture tube.</li> <li>5. Check and readjust EW Corner Parabola item if the adjustment becomes improper after some other geometric adjustments are done.</li> <li>6. Set &lt; <b>16 : 9 aspect mode</b> &gt;.</li> <li>7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.</li> </ol>

Item	Measuring instrument	Test point	Adjustment part	Description
<b>EW TRAPEZIUM Adjustment</b>	Signal generator		<b>Adjust 20 ( 4 : 3 )</b>  <b>Adjust 34 ( 16 : 9 )</b>	1. Receive a <b>CROSS-HATCH</b> signal. 2. Set < <b>4 : 3 aspect mode</b> >. 3. Select < <b>ADJUST 20</b> > from SERVICE MENU. 4. Change EW Trapezium till vertical lines, especially lines at the sides of the picture frame became parallel to the both sides of picture tube as possible. 5. Check and readjust EW Trapezium item if the adjustment becomes improper after some other geometric adjustment. 6. Set < <b>16 : 9 aspect mode</b> >. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.
<b>HORIZONTAL PARALLELOGRAM</b>	Signal generator		<b>Adjust 21 ( 4 : 3 )</b>  <b>Adjust 35 ( 16 : 9 )</b>	1. Receive a <b>CROSS-HATCH</b> signal. 2. Set < <b>4 : 3 aspect mode</b> >. 3. Select < <b>ADJUST 21</b> > from SERVICE MENU. 4. Change Horizontal Parallelogram to set vertical lines orthogonal to the horizontal lines.. 5. Check and readjust Horizontal Parallelogram item if the adjustment becomes improper after some other geometric adjustment. 6. Set < <b>16 : 9 aspect mode</b> >. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.
<b>BOW</b>	Signal generator		<b>Adjust 22 ( 4 : 3 )</b>  <b>Adjust 36 ( 16 : 9 )</b>	1. Receive a <b>CROSS-HATCH</b> signal. 2. Set < <b>4 : 3 aspect mode</b> >. 3. Select < <b>ADJUST 22</b> > from SERVICE MENU. 4. Change Bow to straighten the vertical lines. 5. Check and readjust Bow item if the adjustment becomes improper after some other geometric adjustment. 6. Set < <b>16 : 9 aspect mode</b> >. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.
<b>EW LOWER CORNER PARABOLA Adjustment</b>	Signal generator		<b>Adjust 23 ( 4 : 3 )</b>  <b>Adjust 37 ( 16 : 9 )</b>	1. Receive a <b>CROSS-HATCH</b> signal. 2. Set < <b>4 : 3 aspect mode</b> >. 3. Select < <b>ADJUST 23</b> > from SERVICE MENU. 4. Change EW Lower Corner Parabola till vertical lines at the corners of both sides of picture frame become vertical and parallel to vertical corner sides of picture tube. 5. Check and readjust EW Lower Corner Parabola item if the adjustment becomes improper after some other geometric adjustment. 6. Set < <b>16 : 9 aspect mode</b> >. 7. Adjusts with the step which is the same above from 3 to 5 about the 16 : 9 aspect mode, too.

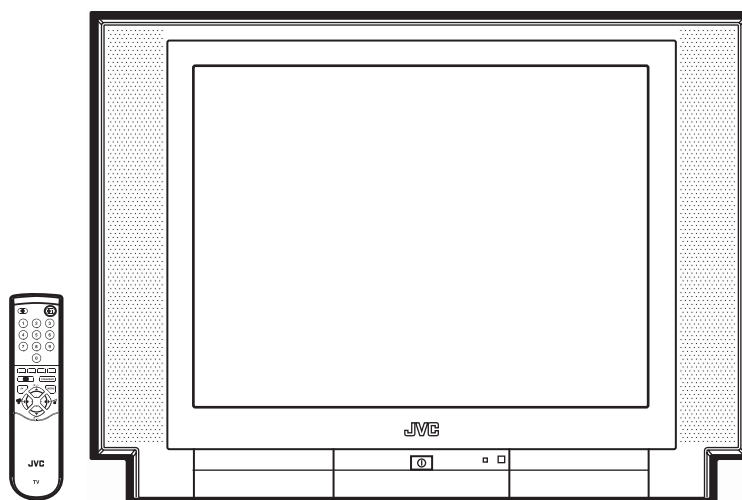
# JVC

## SCHEMATIC DIAGRAMS

### COLOUR TELEVISION

# AV29BF10ENS AV29BF10EPS AV29BF10EES

CD-ROM No.SML200203

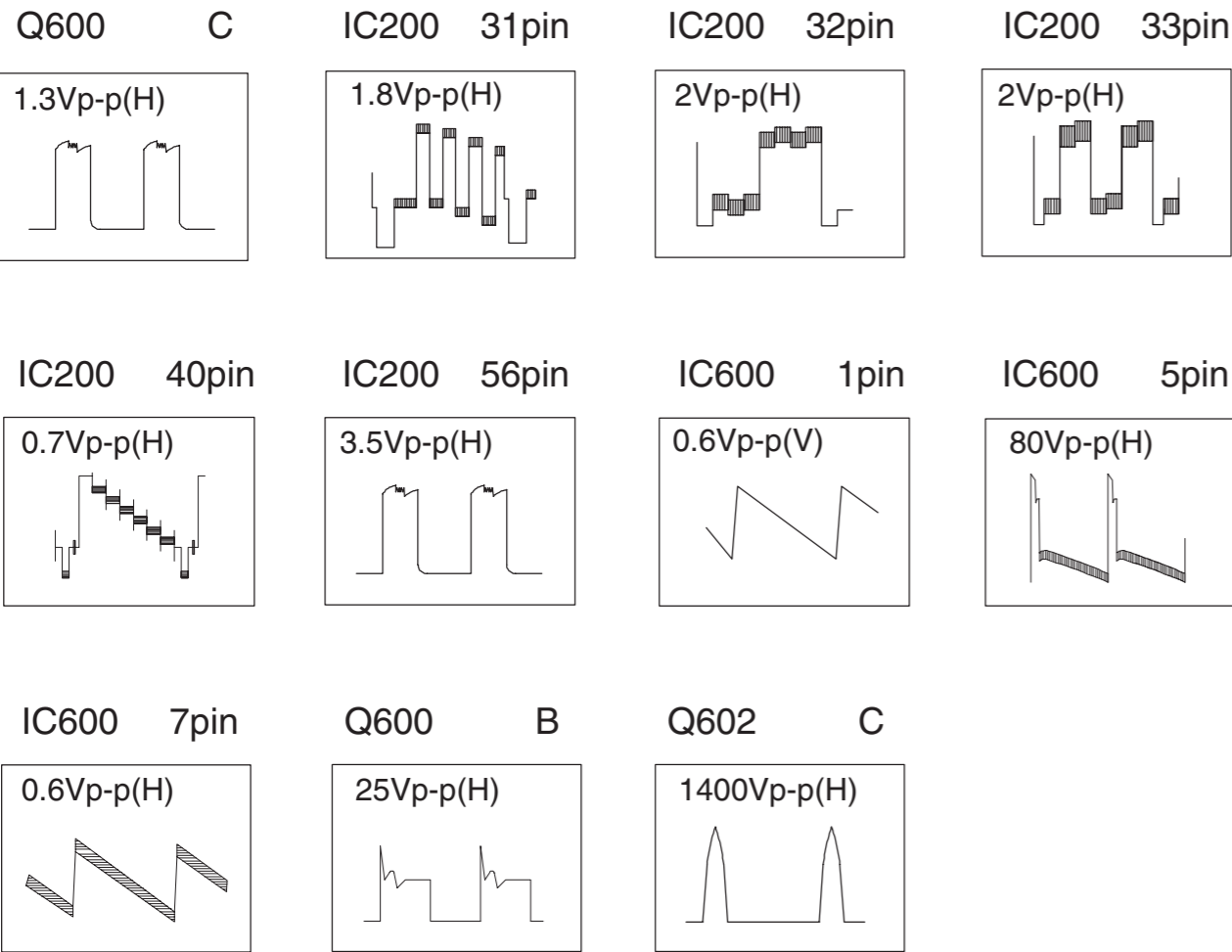


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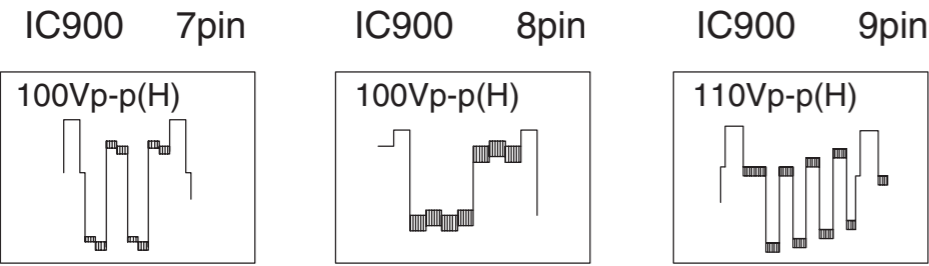
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WAVEFORM DIAGRAMS

MAIN PWB



CRT SOCKET PWB



AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES

STANDARD CIRCUIT DIAGRAM

NOTE ON USING CIRCUIT DIAGRAMS

- 1.SAFETY**  
The components identified by the symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.
- 2.SPECIFIED VOLTAGE AND WAVEFORM VALUES**  
The voltage and waveform values have been measured under the following conditions.
- |  |   |
|--|---|
| (1)Input signal  | : Colour bar signal   |
| (2)Setting positions of each knob/button and variable resistor | : Original setting position when shipped                              |
| (3)Internal resistance of tester                               | :DC 20kΩ /V   |
| (4)Oscilloscope sweeping time                                  | :H ⇒ 20μS/div<br>:V ⇒ 5mS/div<br>:Others ⇒ Sweeping time is specified |
| (5)Voltage values  | :All DC voltage values  |
- \* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATIONS ON THE CIRCUIT DIAGRAM

- (1)Resistors**
- Resistance value
    - No unit :[ Ω ]
    - K :[K Ω ]
    - M :[M Ω ]
  - Type
    - No indication :Carbon resistor
    - OMR :Oxide metal film resistor
    - MFR :Metal film resistor
    - MPR :Metal plate resistor
    - UNFR :Uninflammable resistor
    - FR :Fusible resistor
- \* Composition resistor 1/2 [W] is specified as 1/2S or Comp.
- (2)Capacitors**
- Capacitance value
    - 1 or higher :[pF]
    - less than 1 :[μF]

- Withstand voltage
  - No indication :DC50[V]
  - Others :DC withstand voltage [V]
  - AC indicated :AC withstand voltage [V]
- \* Electrolytic Capacitors
  - 47/50[Example]:Capacitance value [μF]/withstand voltage[V]
- Type
  - No indication :Ceramic capacitor
  - MM :Metalized mylar capacitor
  - PP :Polypropylene capacitor
  - MPP :Metalized polypropylene capacitor
  - MF :Metalized film capacitor
  - TF :Thin film capacitor
  - BP :Bipolar electrolytic capacitor
  - TAN :Tantalum capacitor
- (3)Coils**
  - No unit :[ μH]
  - Others :As specified

4.NOTE FOR REPAIRING SERVICE

- This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE side GND and the ISOLATED(NEUTRAL) side GND.Therefore, care must be taken for the following points.
- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus ( oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.
- ◇ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**
- NOTE**
- ◇ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**  
**When ordering parts, please use the numbers that appear in the Parts List.**

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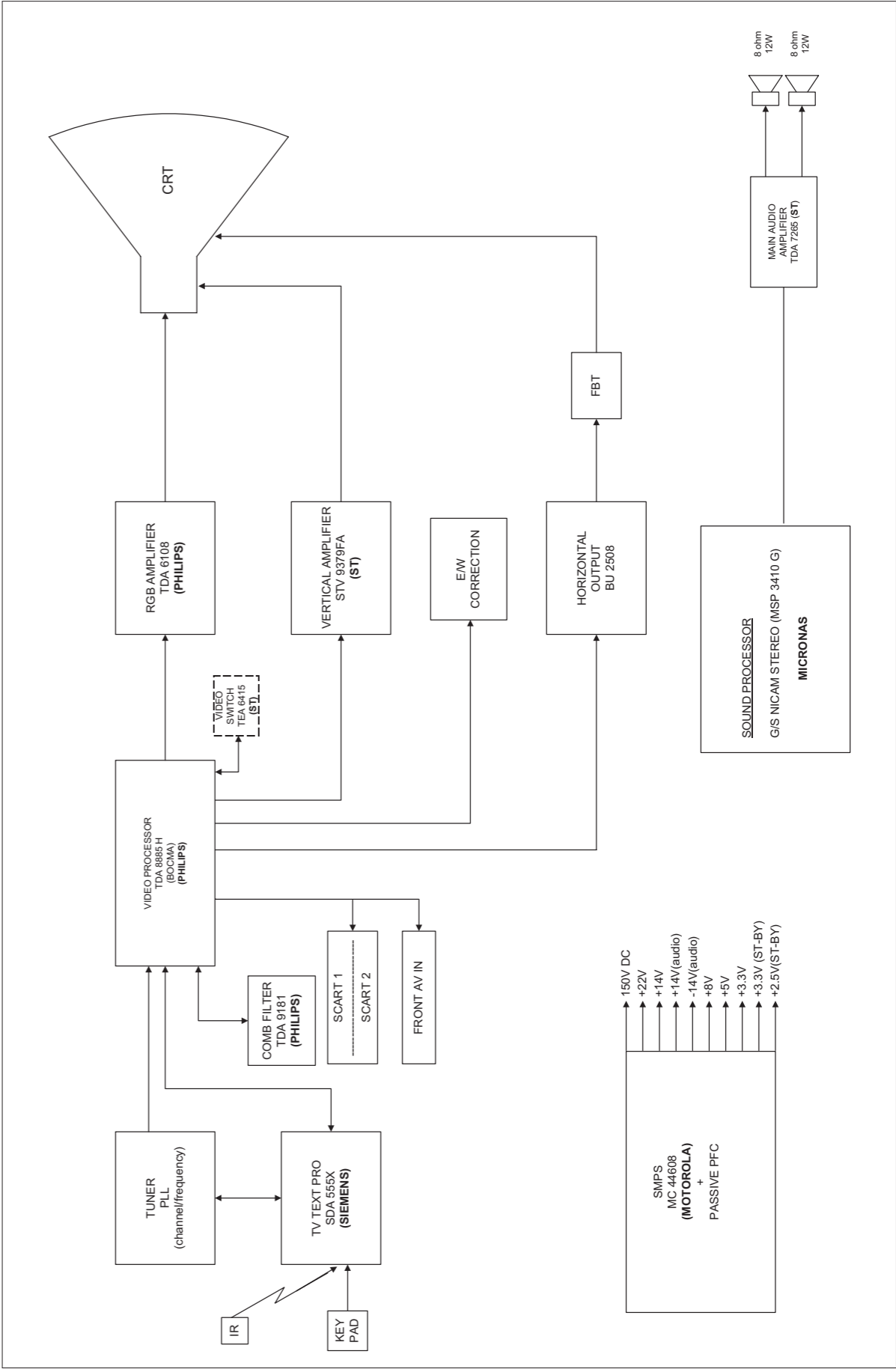
SEMICONDUCTOR SHAPES

TRANSISTOR					
BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

IC					
BOTTOM VIEW	FRONT VIEW				TOP VIEW

CHIP IC		

BLOCK DIAGRAM

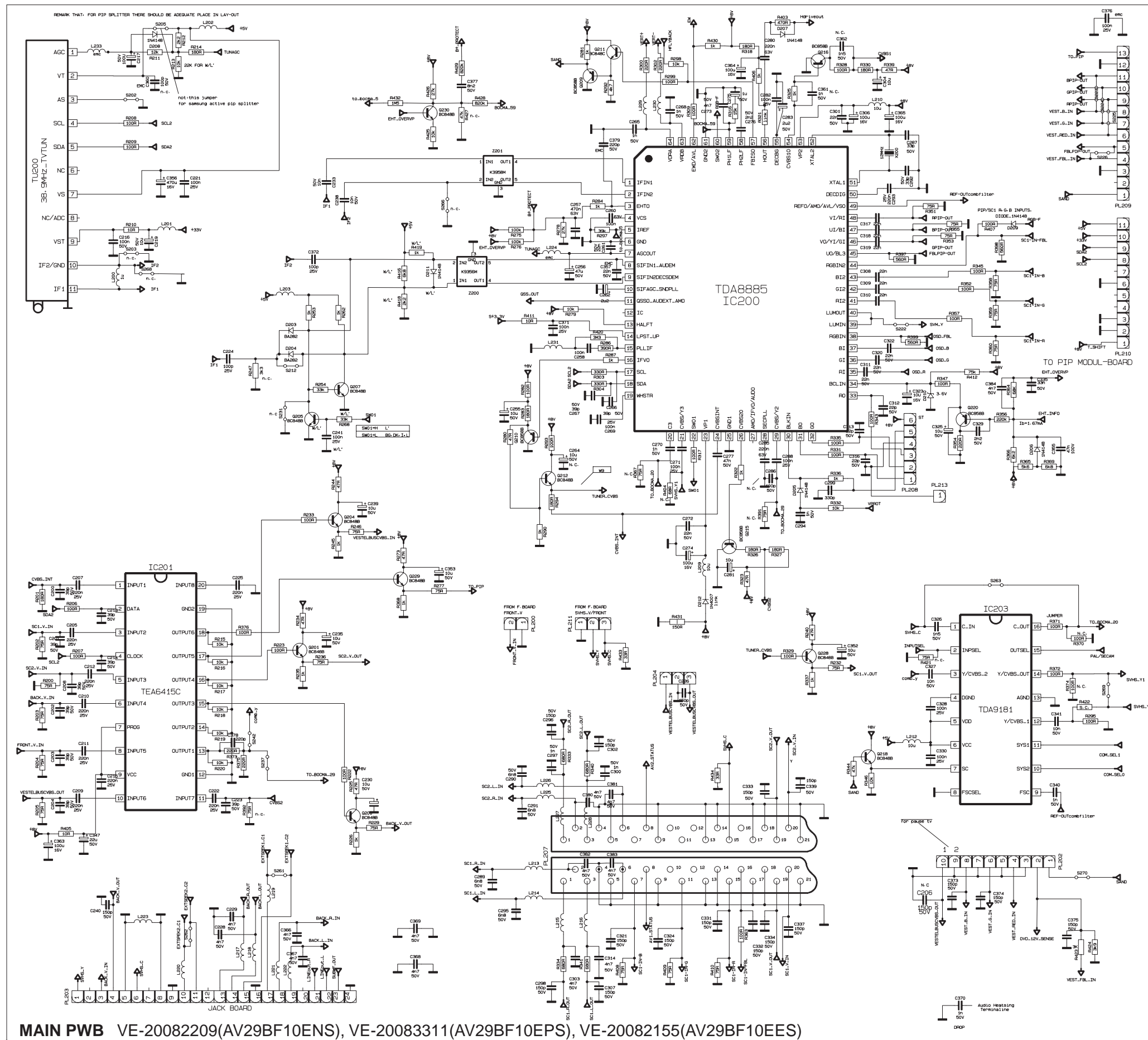


CIRCUIT DIAGRAMS

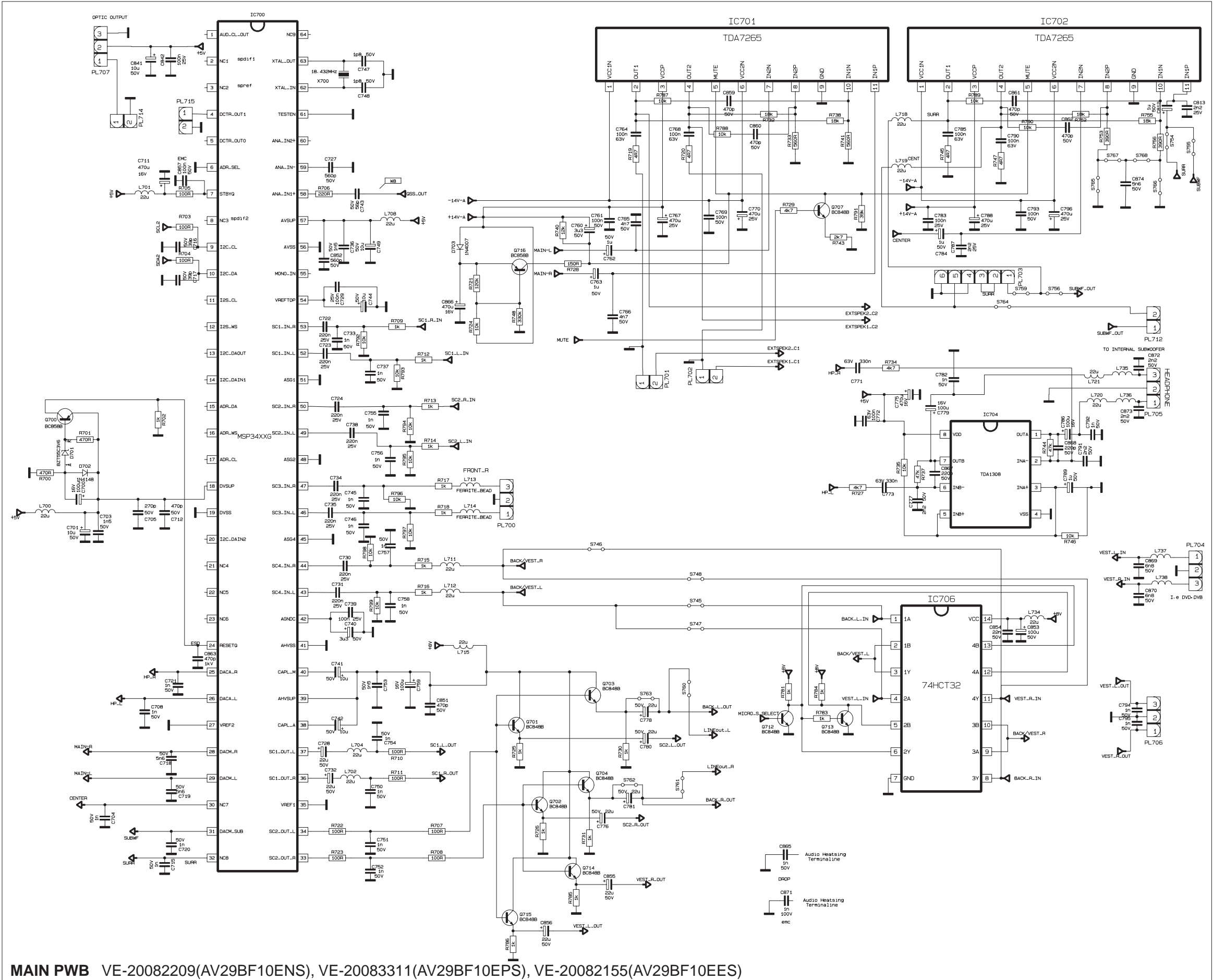
MAIN PWB CIRCUIT DIAGRAM (1/5)

AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES

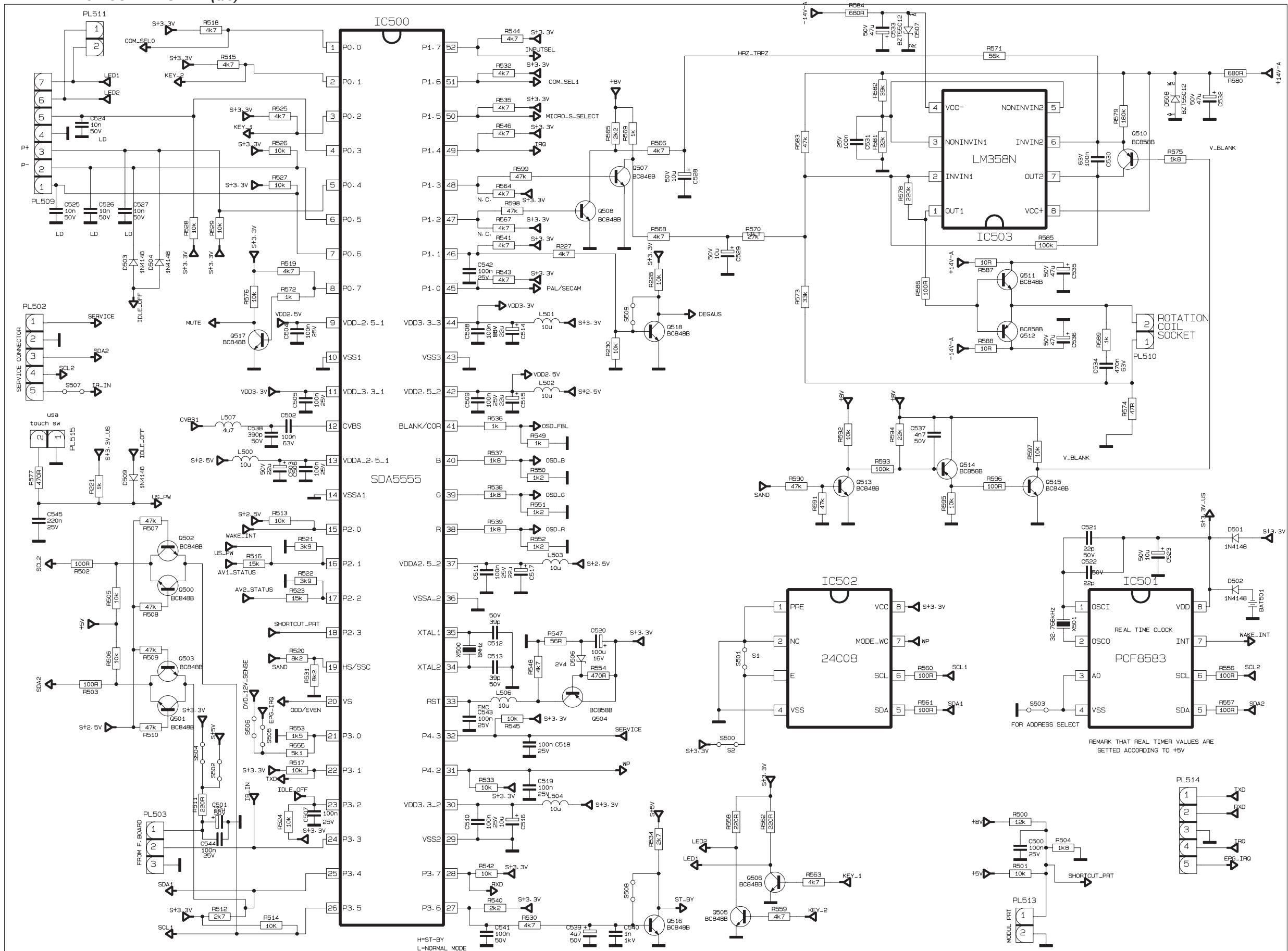
AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES



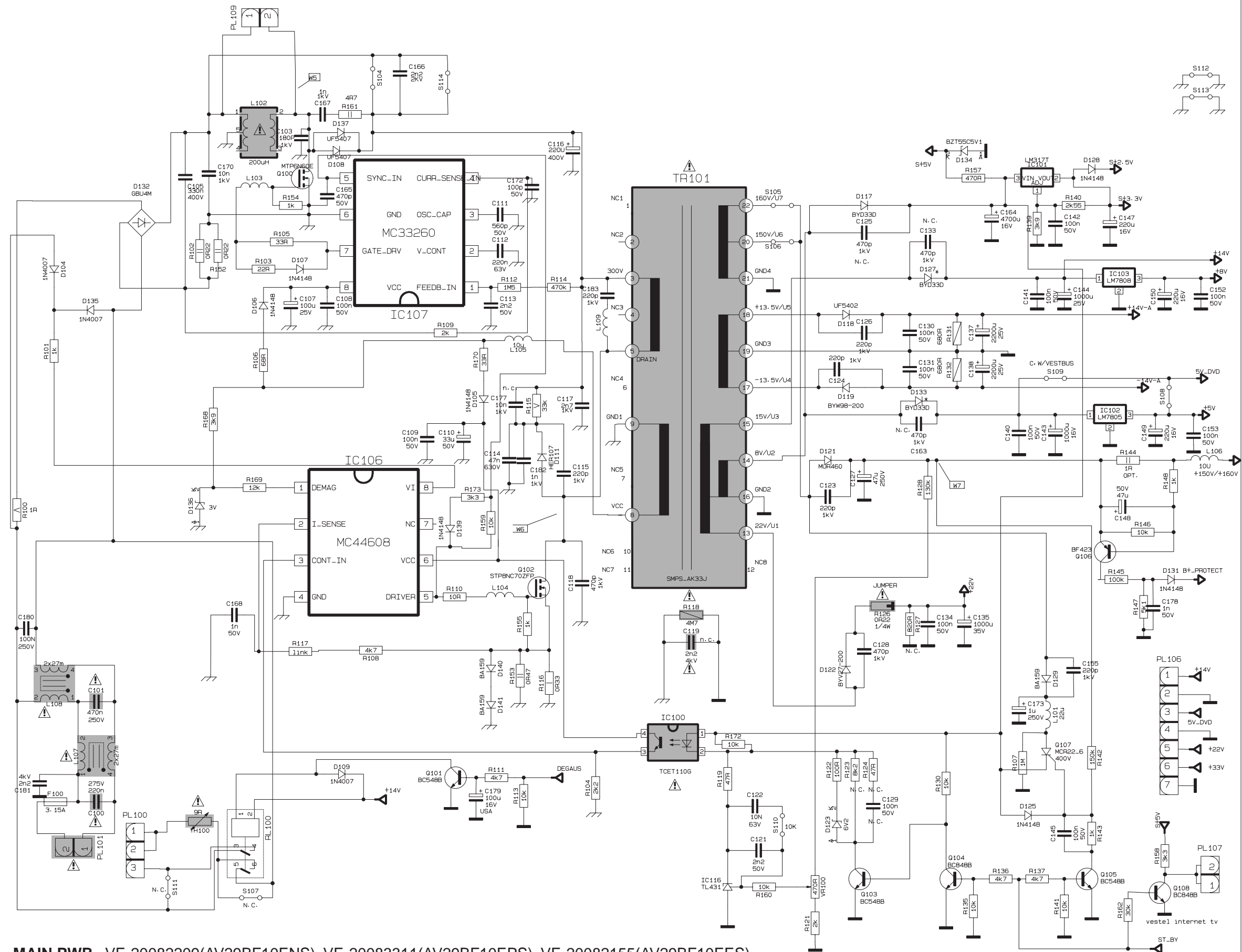
MAIN PWB CIRCUIT DIAGRAM (2/5)



# MAIN PWB CIRCUIT DIAGRAM (3/5)

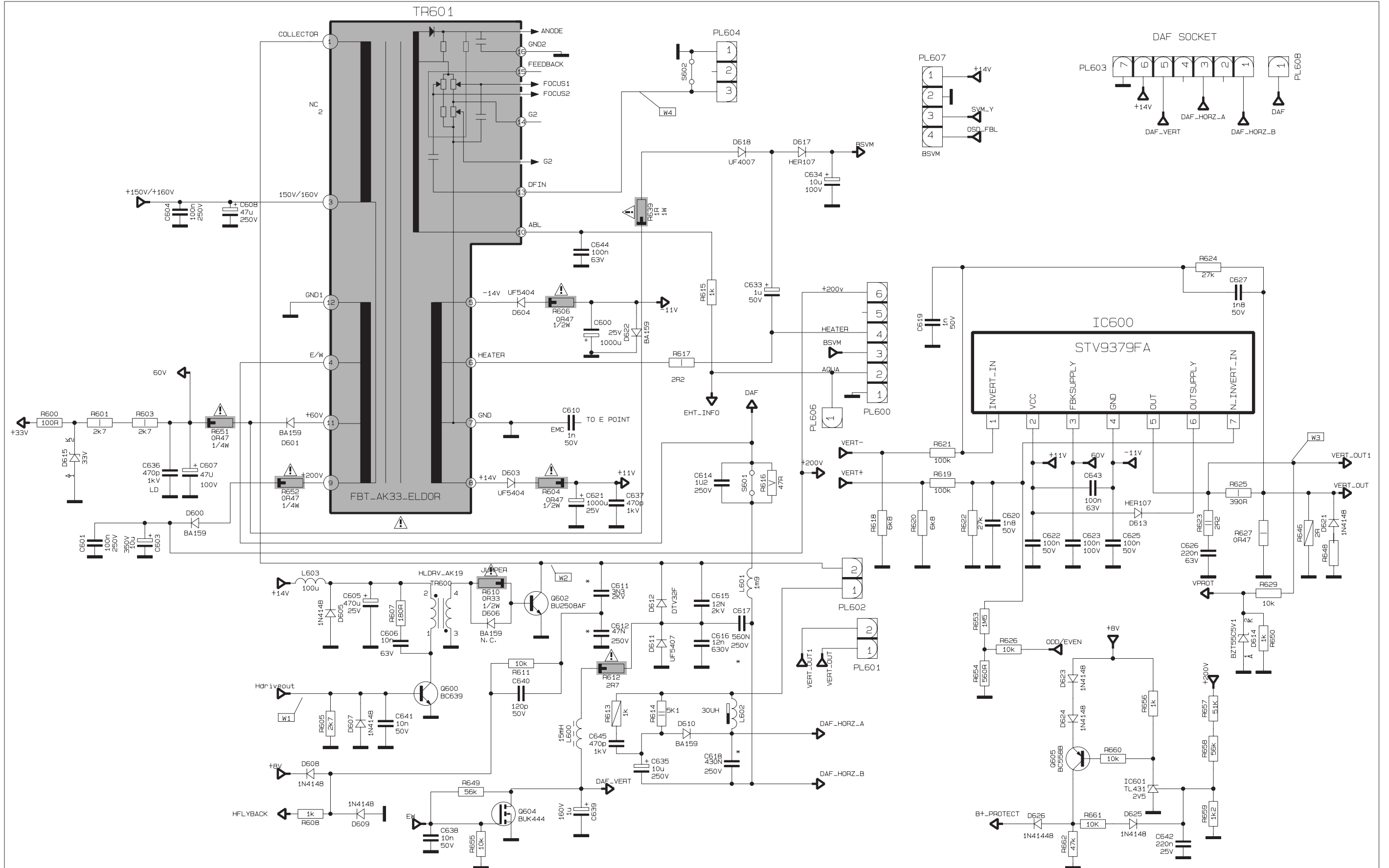


### MAIN PWB CIRCUIT DIAGRAM (4/5)



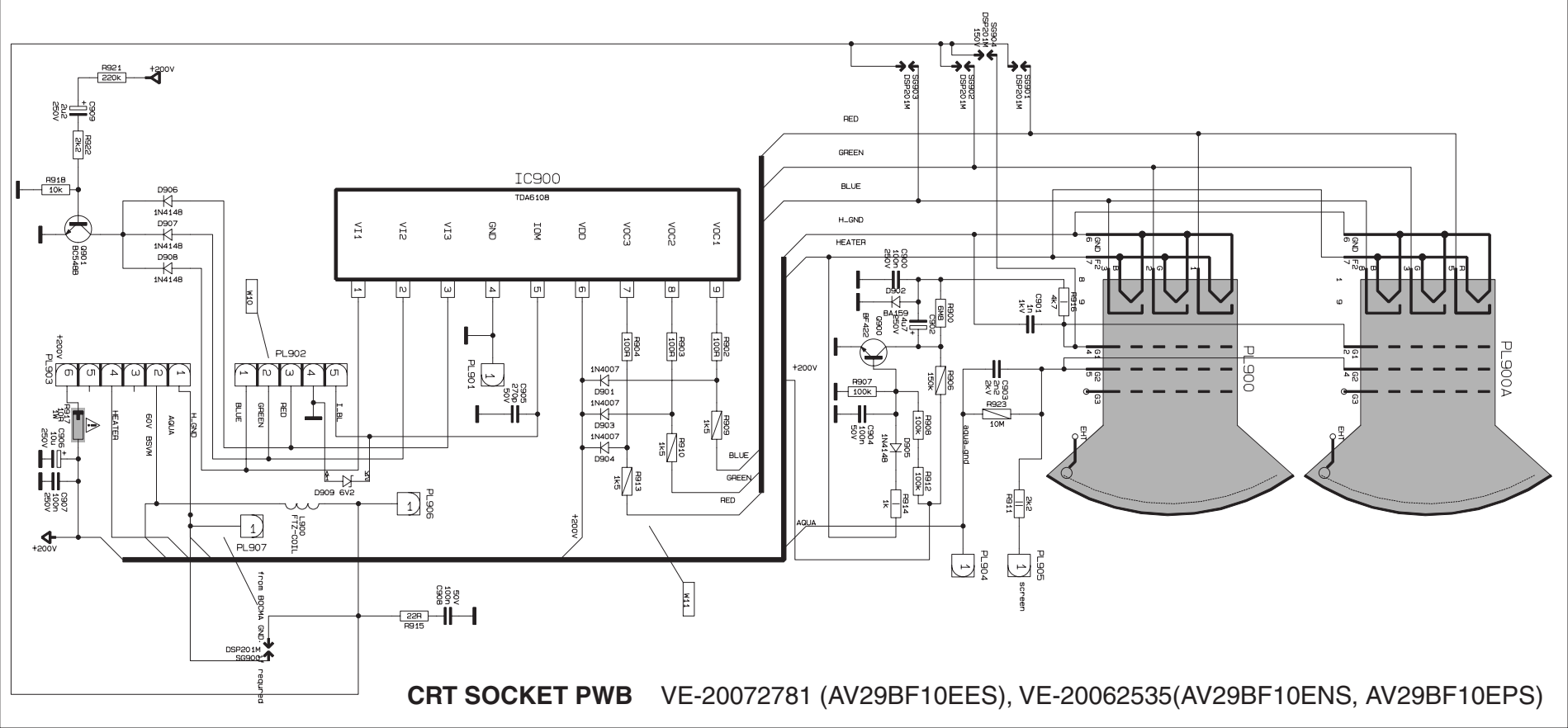
**MAIN PWB** VE-20082209(AV29BF10ENS), VE-20083311(AV29BF10EPS), VE-20082155(AV29BF10EES)

MAIN PWB CIRCUIT DIAGRAM (5/5)

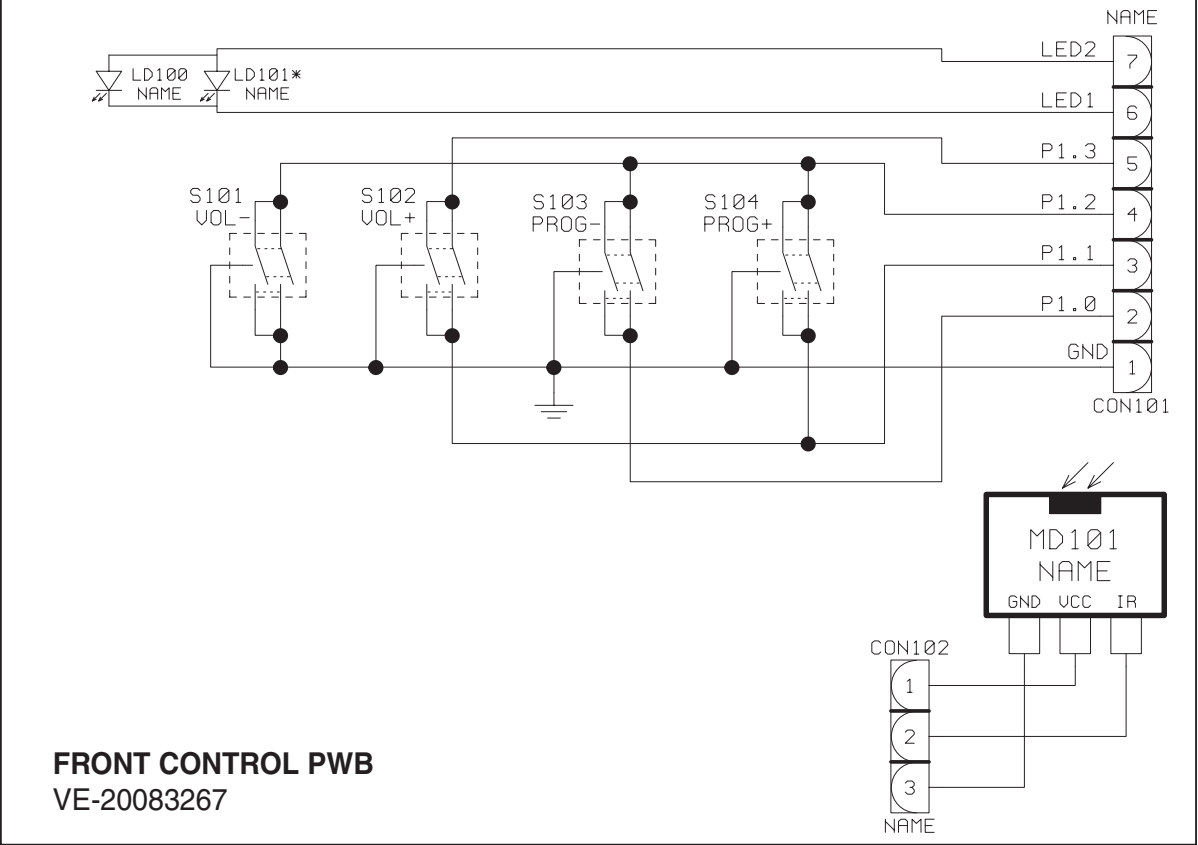


MAIN PWB VE-20082209(AV29BF10ENS), VE-20083311(AV29BF10EPS), VE-20082155(AV29BF10EES)

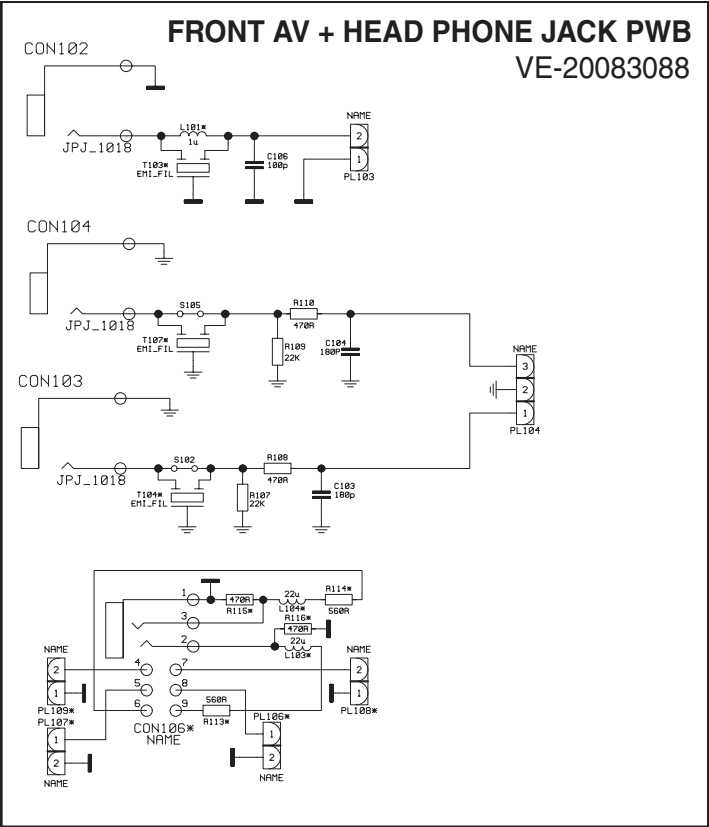
CRT SOCKET PWB CIRCUIT DIAGRAM



FRONT CONTROL PWB CIRCUIT DIAGRAM



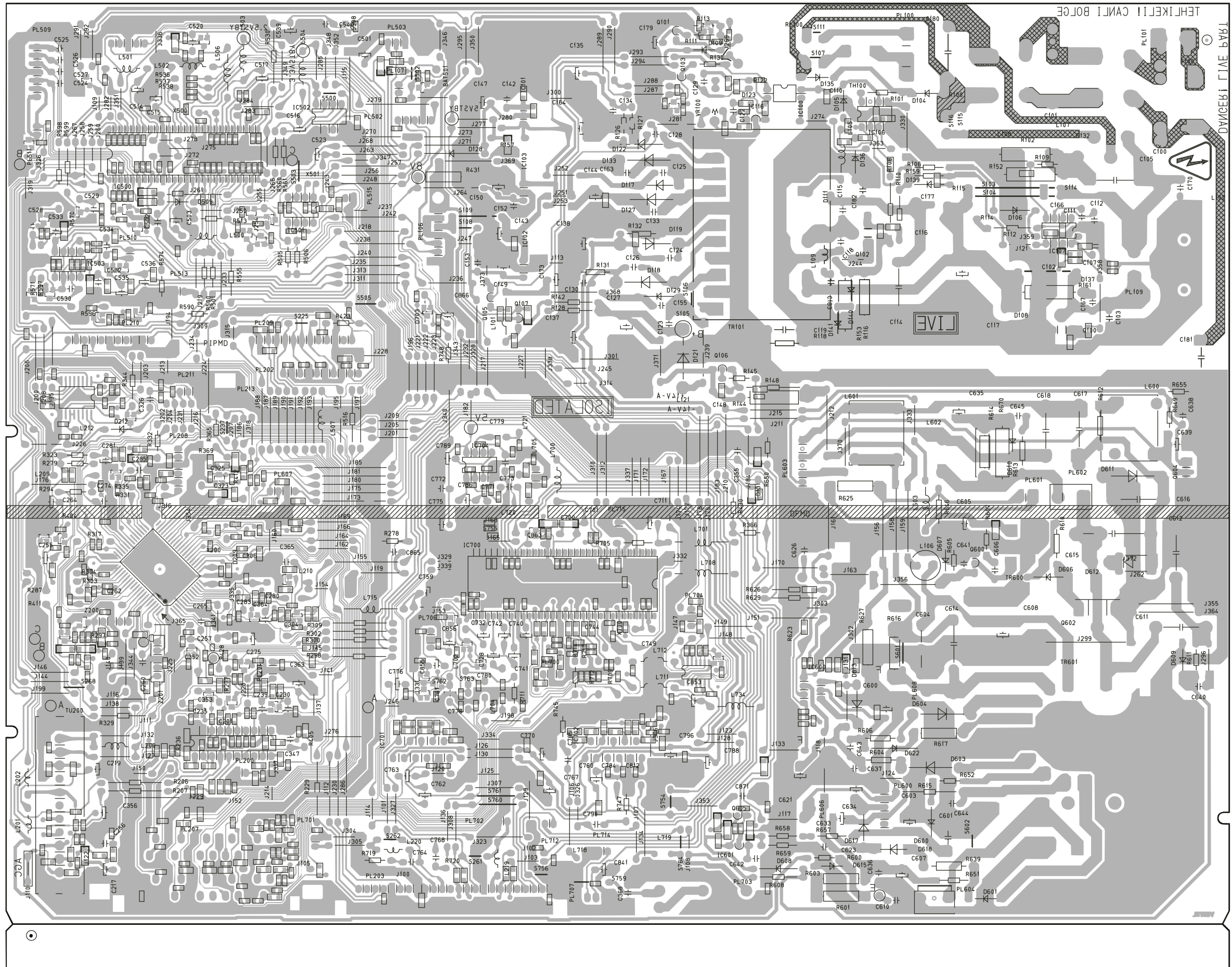
FRONT AV + HEADPHONE JACK PWB CIRCUIT DIAGRAM



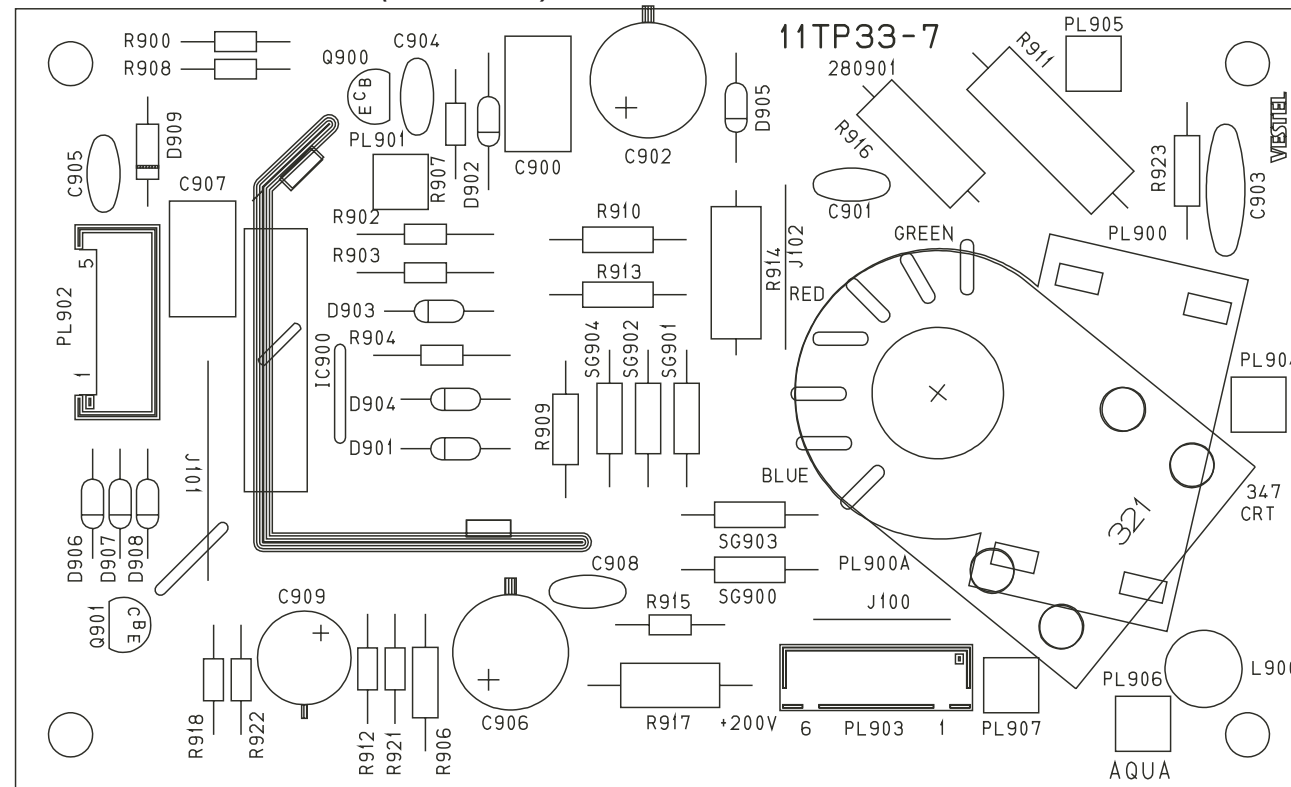
PATTERN DIAGRAMS MAIN PWB PATTERN (PARTS SIDE)

AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES


AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES



**CRT SOCKET PWB PATTERN (PARTS SIDE)**

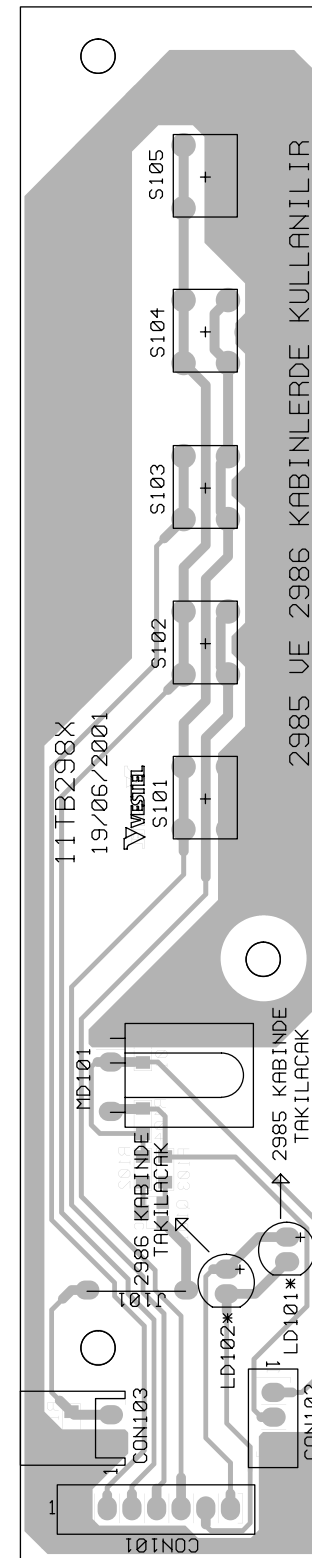


TOP



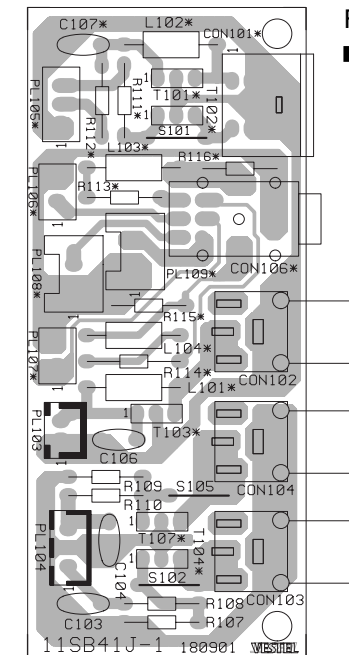
**FRONT CONTROL PWB PATTERN  
(PARTS SIDE)**

TOP

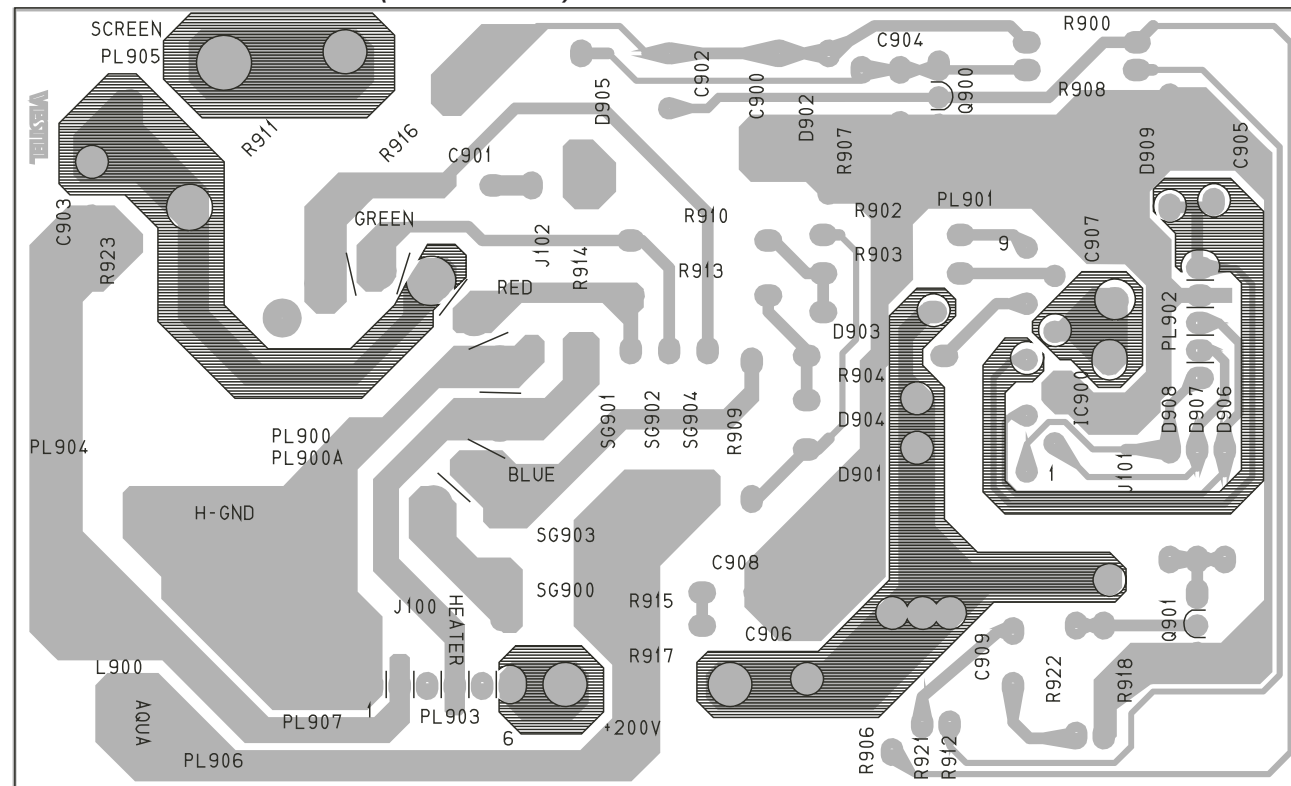


**FRONT AV + HEADPHONE JACK  
PWB PATTERN (PARTS SIDE)**

FRONT  

**CRT SOCKET PWB PATTERN (SOLDER SIDE)**



TOP



VOLTAGE TABLES

■ MAIN PWB

IC600

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	5	0.4
2	0	6	15.4
3	0	7	7.5
4	0		

IC700

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.4	33	3.6
2	0	34	3.6
3	0	35	0
4	4.9	36	3.6
5	0	37	3.6
6	0	38	6.8
7	4.9	39	7.8
8	0	40	6.8
9	4.5	41	0
10	4.5	42	3.6
11	2.4	43	3.6
12	2.4	44	3.6
13	2.4	45	0
14	1.3	46	3.6
15	1.3	47	3.6
16	1.3	48	0
17	1.3	49	3.6
18	4.9	50	3.6
19	0	51	0
20	1.3	52	3.6
21	0	53	3.6
22	0	54	2.5
23	0	55	NC
24	4.8	56	0
25	0	57	4.9
26	0	58	1.4
27	0	59	1.4
28	0	60	NC
29	0	61	0
30	0	62	2.3
31	0	63	2.2
32	0	64	NC

IC701

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	-15.0	7	0
2	-0.2	8	0
3	14.8	9	0
4	-0.1	10	0
5	2.4	11	0
6	-15.0		

IC704

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.4	5	2.4
2	2.4	6	2.4
3	2.4	7	2.4
4	0	8	4.9

	E (D)	C (S)	B (G)
Q100	237	0	1.2
Q101	0	14.6	0
Q102	410	0	1.9
Q103	0	1.3	0
Q104	0	0	0.6
Q105	0	0	0.6
Q106	147.3	146.9	0
Q107	7.8	8.4	163.8
Q200	1.4	7.7	2.0
Q209	1.3	0	0.6
Q210	3.6	0	2.9
Q211	0.6	7.8	0.3
Q212	2.7	0	0
Q215	3.4	0	2.8
Q216	3.4	0	2.8
Q218	0.7	7.8	1.3
Q228	2.2	7.7	2.7
Q229	1.4	7.7	2
Q500	4.6	3.0	2.2
Q501	4.6	3.0	2.3
Q502	3.0	4.6	2.2
Q503	3.1	4.6	2.3
Q504	3.2	3.2	2.6
Q505	0	2.0	0
Q506	0	0.1	0.7
Q507	0	3.3	0.5
Q508	0	2.5	0.5
Q510	4.2	3.0	7.6
Q511	2.5	14.8	3.2
Q512	2.5	-15.0	3.2
Q513	0	5.7	0.3
Q514	0	7.8	7.5
Q515	0	7.5	0
Q516	0	2.6	0
Q517	0	3.1	0
Q600	0	0	14.1
Q602	0	-158.5	-0.1
Q604	0	32.8	2.9
Q605	7.5	0	7.5
Q700	4.9	4.8	4.1
Q701	3.0	7.8	3.6
Q701	3.0	7.8	3.6
Q703	3.0	7.8	3.6
Q704	3.0	7.8	3.6
Q707	2.4	2.4	3.0
Q716	14.9	2.4	14.9

■ CRT SOCKET PWB

IC900

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.7	6	199
2	2.7	7	116
3	3.6	8	111.5
4	0	9	111.9
5	5.6		

	E(D)	C(S)	B(G)
Q100	237	0	1.2
Q101	0	14.6	0

IC100

PIN NO.	VOLTAGE
1	8.4
2	7.3
3	4.9
4	13.7

IC101

PIN NO.	VOLTAGE
1	2.0
2	3.3
3	8.4

IC102

PIN NO.	VOLTAGE
1	8.3
2	0
3	4.9

IC103

PIN NO.	VOLTAGE
1	14.6
2	0
3	7.8

IC106

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.0	5	1.9
2	0	6	13.7
3	4.9	7	0
4	0	8	188.1

IC107

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.6	5	1.0
2	1.4	6	0
3	0.1	7	1.3
4	0	8	13.6

IC200

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.8	33	2.6
2	1.8	34	2.9
3	2.1	35	3.3
4	3.6	36	3.7
5	3.8	37	3.3
6	0	38	0.1
7	2.4	39	3.3
8	1.8	40	3.2
9	1.8	41	0
10	2.5	42	0
11	3.0	43	0
12	7.2	44	0
13	3.3	45	0
14	2.3	46	2.5
15	3.0	47	0
16	4.6	48	0
17	4.5	49	3.9
18	3.8	50	4.9
19	0	51	1.5
20	1.2	52	1.5
21	3.6	53	7.8
22	2	54	2.8
23	7.0	55	3.9
24	3.6	56	1.6
25	0	57	0.3
26	2.8	58	2.8
27	2.8	59	3.8
28	2.2	60	0
29	3.7	61	0
30	5.4	62	2.9
31	2.7	63	2.4
32	2.7	64	2.4

IC201

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.1	11	3.0
2	4.5	12	0
3	2.7	13	2.7
4	4.5	14	2.8
5	2.7	15	2.0
6	3.6	16	2.0
7	7.5	17	2.8
8	2.7	18	2.8
9	7.5	19	0
10	3.6	20	2.7

IC203

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.4	9	0
2	0	10	0.7
3	1.5	11	4.9
4	0	12	4.9
5	1.3	13	0
6	0	14	1.5
7	2.9	15	3.2
8	0.6	16	0.8

IC500

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.2	27	0
2	0	28	3.2
3	1.9	29	0
4	3.2	30	3.2
5	3.2	31	3.2
6	3.2	32	3.2
7	3.2	33	3.2
8	0	34	0.4
9	2.4	35	0.5
10	0	36	0
11	3.3	37	2.4
12	0.8	38	0.3
13	2.4	39	0.2
14	0	40	0.1
15	2.4	41	0.2
16	0	42	2.4
17	0	43	0
18	1.5	44	3.2
19	0.6	45	0
20	1.1	46	0
21	3.2	47	1.0
22	3.2	48	1.3
23	3.2	49	3.2
24	3.6	50	3.2
25	3.0	51	0
26	3.0	52	3.2

IC502

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	5	3.0
2	0	6	3.0
3	0	7	3.2
4	0	8	3.2

IC503

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.1	5	4.2
2	4.2	6	4.2
3	4.2	7	3.0
4	-12.1	8	12.0

IC600

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	5	0.4
2	0	6	15.4
3	0	7	7.5
4	0		

IC700

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.4	33	3.6
2	0	34	3.6
3	0	35	0
4	4.9	36	3.6
5	0	37	3.6
6	0	38	6.8
7	4.9	39	7.8
8	0	40	6.8
9	4.5	41	0
10	4.5	42	3.6
11	2.4	43	3.6
12	2.4	44	3.6
13	2.4	45	0
14	1.3	46	3.6
15	1.3	47	3.6
16	1.3	48	0
17	1.3	49	3.6
18	4.9	50	3.6
19	0	51	0
20	1.3	52	3.6
21	0	53	3.6
22	0	54	2.5
23	0	55	NC
24	4.8	56	0
25	0	57	4.9
26	0	58	1.4
27	0	59	1.4
28	0	60	NC
29	0	61	0
30	0	62	2.3
31	0	63	2.2
32	0	64	NC

IC701

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	-15.0	7	0
2	-0.2	8	0
3	14.8	9	0
4	-0.1	10	0
5	2.4	11	0
6	-15.0		

IC704

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.4	5	2.4
2	2.4	6	2.4
3	2.4	7	2.4
4	0	8	4.9

	E (D)	C (S)	B (G)
Q100	237	0	1.2
Q101	0	14.6	0
Q102	410	0	1.9
Q103	0	1.3	0
Q104	0	0	0.6
Q105	0	0	0.6
Q106	147.3	146.9	0
Q107	7.8	8.4	163.8
Q200	1.4	7.7	2.0
Q209	1.3	0	0.6
Q210	3.6	0	2.9
Q211	0.6	7.8	0.3
Q212	2.7	0	0
Q215	3.4	0	2.8
Q216	3.4	0	2.8
Q218	0.7	7.8	1.3
Q228	2.2	7.7	2.7
Q229	1.4	7.7	2
Q500	4.6	3.0	2.2
Q501	4.6	3.0	2.3
Q502	3.0	4.6	2.2
Q503	3.1	4.6	2.3
Q504	3.2	3.2	2.6
Q505	0	2.0	0
Q506	0	0.1	0.7
Q507	0	3.3	0.5
Q508	0	2.5	0.5
Q510	4.2	3.0	7.6
Q511	2.5	14.8	3.2
Q512	2.5	-15.0	3.2
Q513	0	5.7	0.3
Q514	0	7.8	7.5
Q515	0	7.5	0
Q516	0	2.6	0
Q517	0	3.1	0
Q600	0	0	14.1
Q602	0	-158.5	-0.1
Q604	0	32.8	2.9
Q605	7.5	0	7.5
Q700	4.9	4.8	4.1
Q701	3.0	7.8	3.6
Q701	3.0	7.8	3.6
Q703	3.0	7.8	3.6
Q704	3.0	7.8	3.6
Q707	2.4	2.4	3.0
Q716	14.9	2.4	14.9

■ CRT SOCKET PWB

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.7	6	199
2	2.7	7	116
3	3.6	8	111.5
4	0	9	111.9
5	5.6		

	E(D)	C(S)	B(G)
Q100	237	0	1.2
Q101	0	14.6	0

■ MAIN PWB

IC100

PIN NO.	VOLTAGE
1	8.4
2	7.3
3	4.9
4	13.7

IC101

PIN NO.	VOLTAGE
1	2.0
2	3.3
3	8.4

IC102

PIN NO.	VOLTAGE
1	8.3
2	0
3	4.9

IC103

PIN NO.	VOLTAGE
1	14.6
2	0
3	7.8

IC106

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.0	5	1.9
2	0	6	13.7
3	4.9	7	0
4	0	8	188.1

IC107

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2.6	5	1.0
2	1.4	6	0
3	0.1	7	1.3
4	0	8	13.6

IC200

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.8	33	2.6
2	1.8	34	2.9
3	2.1	35	3.3
4	3.6	36	3.7
5	3.8	37	3.3
6	0	38	0.1
7	2.4	39	3.3
8	1.8	40	3.2
9	1.8	41	0
10	2.5	42	0
11	3.0	43	0
12	7.2	44	0
13	3.3	45	0
14	2.3	46	2.5
15	3.0	47	0
16	4.6	48	0
17	4.5	49	3.9
18	3.8	50	4.9
19	0	51	1.5
20	1.2	52	1.5
21	3.6	53	7.8
22	2	54	2.8
23	7.0	55	3.9
24	3.6	56	1.6
25	0	57	0.3
26	2.8	58	2.8
27	2.8	59	3.8
28	2.2	60	0
29	3.7	61	0
30	5.4	62	2.9
31	2.7	63	2.4
32	2.7	64	2.4

IC201

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.1	11	3.0
2	4.5	12	0
3	2.7	13	2.7
4	4.5	14	2.8
5	2.7	15	2.0
6	3.6	16	2.0
7	7.5	17	2.8
8	2.7	18	2.8
9	7.5	19	0
10	3.6	20	2.7

IC203

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.4	9	0
2	0	10	0.7
3	1.5	11	4.9
4	0	12	4.9
5	1.3	13	0
6	0	14	1.5
7	2.9	15	3.2
8	0.6	16	0.8

IC500

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.2	27	0
2	0	28	3.2
3	1.9	29	0
4	3.2	30	3.2
5	3.2	31	3.2
6	3.2	32	3.2
7	3.2	33	3.2
8	0	34	0.4
9	2.4	35	0.5
10	0	36	0
11	3.3	37	2.4
12	0.8	38	0.3
13	2.4	39	0.2
14	0	40	0.1
15	2.4	41	0.2
16	0	42	2.4
17	0	43	0
18	1.5	44	3.2
19	0.6	45	0
20	1.1	46	0
21	3.2	47	1.0
22	3.2	48	1.3
23	3.2	49	3.2
24	3.6	50	3.2
25	3.0	51	0
26	3.0	52	3.2

IC502

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0	5	3.0
2	0	6	3.0
3	0	7	3.2
4	0	8	3.2

IC503

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	3.1	5	4.2
2	4.2	6	4.2
3	4.2	7	3.0
4	-12.1	8	12.0

AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES



VICTOR COMPANY OF JAPAN, LIMITED  
HOME AV NETWORK BUSINESS UNIT. 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan

# PARTS LIST

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## USING PW BOARD & REMOTE CONTROL UNIT

<b>Model</b> <b>PWB ASS'Y</b>	<b>AV29BF10ENS</b>	<b>AV29BF10EPS</b>	<b>AV29BF10EES</b>
<b>MAIN PWB</b>	VE-20082209	VE-20083311	VE-20082155
<b>CRT SOCKET PWB</b>	VE-20062535	←	VE-20072781
<b>FRONT CONTROL PWB</b>	VE-20083267	←	←
<b>FRONT AV + HEADPHONE JACK PWB</b>	VE-20083088	←	←
<b>REMOTE CONTROL UNIT</b>	VE-30015781 (RM-C85)	←	←

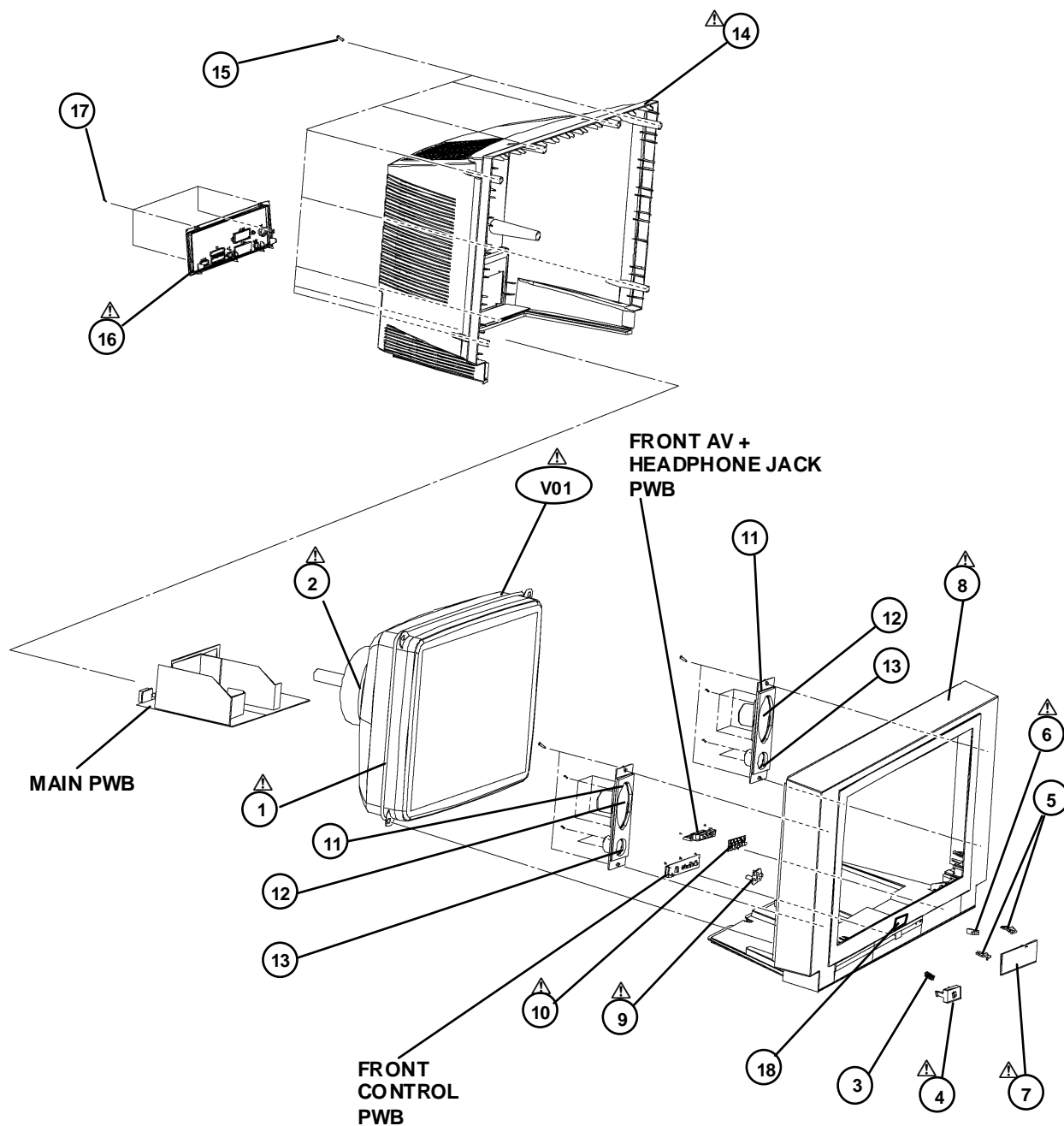
AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES

## EXPLODED VIEW PARTS LIST

[ SILVER model : AV29BF10ENS, AV29BF10EES, AV29BF10EPS ]

△	Ref.No.	Part No.	Part Name	Description
△	V01	VE-20085273	CRT KIT (29") AK33J	Inc. DY, PC MAGNET, WEDGE, DEG COIL(VE-30012971)
△	1	VE-30012971	DEG COIL	
△	2	VE-30015231	ROTATION COIL	
	3	VE-35000013	SPRING ON/OFF SWITCH	
△	4	VE-20059930	BUTTON ON/OFF	
	5	VE-20003605	PIN (FRONT AV DOOR)	
	6	VE-40000026	EJECTOR CLIP-CLAP	
△	7	VE-20081204	CONTROL PANEL DOOR	
△	8	VE-20082432	FRONT PANEL	
△	9	VE-20081212	LENS LED	
△	10	VE-20082371	BUTTON FUNCTION	
	11	VE-40009351	SPONGE	(X2)
	12	VE-30001950	SPEAKER 8R 15W (77x128)	(X2)
	13	VE-30001947	TWEETER 8R 15W (CLOSED)	(X2)
△	14	VE-20059055	BACK COVER	
	15	VE-35000216	SCREW 3.9X19	(X8)
△	16	VE-20084842	BACK DOOR	
	17	VE-35000217	SCREW 3.5X9.5	(X4)
	18	VE-40009154	LOGO JVC	

## EXPLODED VIEW



## PRINTED WIRING BOARD PARTS LIST

[ AV29BF10ENS ]

## MAIN P.W. BOARD ASS'Y (VE-20082209)

△ Symbol	No.	Part No.	Part Name	Description
<b>RESISTOR</b>				
R100	VE-30001259	VW RES.	5W 1R J	
R102	VE-30001132	MO RES.	2W 0.22R J	
R106	VE-30000767	CF RES.	1/4W 68R J	
R109	VE-30000913	MF RES.	1/4W 2K J	
R111	VE-30000718	CF RES.	1/4W 4.7K J	
R114	VE-30000729	CF RES.	1/4W 470K J	
R118	VE-30001257	MG RES.	1/2W 4.7M J	
R128	VE-30000513	CF RES.	1/4W 130K J	
R131	VE-30000770	CF RES.	1/4W 680R J	
R132	VE-30000770	CF RES.	1/4W 680R J	
R14	VE-30000481	CF RES.	1/4W 1M J	
R142	VE-30000536	CF RES.	1/4W 150K J	
R144	VE-30006758	MO RES.	1W 0.82R J	
R145	VE-30000477	CF RES.	1/4W 100K J	
R15	VE-30000541	CF RES.	1/4W 1.5M J	
R152	VE-30001132	MO RES.	2W 0.22R J	
R153	VE-30001174	MO RES.	2W 0.47R J	
R157	VE-30000712	CF RES.	1/4W 470R J	
R161	VE-30006755	MO RES.	2W 4.7R J	
R17	VE-30000660	CF RES.	1/4W 3.3K J	
R236	VE-30000792	CF RES.	1/4W 75R J	
R278	VE-30000633	CF RES.	1/4W 27K J	
R294	VE-30000554	CF RES.	1/4W 180R J	
R300	VE-30000583	CF RES.	1/4W 220R J	
R302	VE-30000583	CF RES.	1/4W 220R J	
R303	VE-30000655	CF RES.	1/4W 330R J	
R304	VE-30000655	CF RES.	1/4W 330R J	
R323	VE-30000706	CF RES.	1/4W 47R J	
R329	VE-30000460	CF RES.	1/4W 100R G	
R332	VE-30000471	CF RES.	1/4W 10K J	
R365	VE-30000748	CF RES.	1/4W 5.6K J	
R366	VE-30000760	CF RES.	1/4W 6.2K J	
R369	VE-30000775	CF RES.	1/4W 6.8K J	
R405	VE-30000452	CF RES.	1/4W 10R J	
R411	VE-30000452	CF RES.	1/4W 10R J	
R500	VE-30000500	CF RES.	1/4W 12K J	
R516	VE-30000531	CF RES.	1/4W 15K J	
R537	VE-30000560	CF RES.	1/4W 1.8K J	
R538	VE-30000560	CF RES.	1/4W 1.8K J	
R571	VE-30000752	CF RES.	1/4W 56K J	
R590	VE-30000723	CF RES.	1/4W 47K J	
R598	VE-30000723	CF RES.	1/4W 47K J	
R599	VE-30000723	CF RES.	1/4W 47K J	
R601	VE-30001138	MO RES.	1W 2.7K J	
R603	VE-30001138	MO RES.	1W 2.7K J	
△ R604	VE-30001244	FUSE RES.	1/2W 0.47R J	
R605	VE-30000628	CF RES.	1/4W 2.7K J	
△ R606	VE-30001244	FUSE RES.	1/2W 0.47R J	
R607	VE-30000554	CF RES.	1/4W 180R J	
△ R612	VE-30001232	FUSE RES.	1/4W 2.7R J	
R614	VE-30015721	MO RES.	5W 2.2K J	
R615	VE-30000848	MF RES.	1/4W 1K F	
△ R617	VE-30001215	FUSE RES.	1W 1R J	
R623	VE-30001134	MO RES.	2W 2.2R J	
R625	VE-30001162	MO RES.	1W 390R J	
R627	VE-30001088	MO RES.	1W 1R J	
△ R651	VE-30001245	FUSE RES.	1/4W 0.47R J	
△ R652	VE-30001245	FUSE RES.	1/4W 0.47R J	
R657	VE-30000993	MF RES.	1/4W 51K J	
R658	VE-30007202	MF RES.	1/4W 56K F	
R659	VE-30000865	MF RES.	1/4W 1.2K J	
R670	VE-30015721	MO RES.	5W 2.2K J	
R7	VE-30001155	MO RES.	2W 33K J	
R709	VE-30000466	CF RES.	1/4W 1K J	
R711	VE-30000459	CF RES.	1/4W 100R J	
R712	VE-30000466	CF RES.	1/4W 1K J	
R713	VE-30000466	CF RES.	1/4W 1K J	
R714	VE-30000466	CF RES.	1/4W 1K J	
R719	VE-30000734	CF RES.	1/4W 4.7R J	
R720	VE-30000734	CF RES.	1/4W 4.7R J	
R748	VE-30000670	CF RES.	1/4W 330K J	
R8	VE-30001155	MO RES.	2W 33K J	

## CAPACITOR

C1	VE-30000352	EL CAP.	100UF 16V M
△ C100	VE-30000094	MKT CAP.	220NF AC275V M

△ Symbol	No.	Part No.	Part Name	Description
<b>CAPACITOR</b>				
△ C101	VE-30007858	MKT CAP.	470NF AC275V M (P=22.5MM)	
△ C105	VE-30000153	MKT CAP.	330NF 400V J	
C107	VE-30000353	EL CAP.	100UF 25V M	
C11	VE-30006748	EL CAP.	4.7UF 350V M	
C110	VE-30000387	EL CAP.	33UF 50V M	
C111	VE-30000266	CER CAP.	560PF 50V J SL	
C112	VE-30000092	MKT CAP.	220NF 63V J	
C114	VE-30000161	MKT CAP.	47NF 630V J	
C115	VE-30007308	CER CAP.	220PF 1KV K (PULSE)	
C116	VE-30013690	EL CAP.	220UF 450V M 105° C	
C117	VE-30006940	CER CAP.	2.7NF 1KV K B	
C118	VE-30007308	CER CAP.	220PF 1KV K (PULSE)	
C119	VE-30000440	CER CAP.	2.2NF 4KV M	
C12	VE-30006748	EL CAP.	4.7UF 350V M	
C122	VE-30000071	MKT CAP.	10NF 63V J	
C123	VE-30007308	CER CAP.	220PF 1KV K (PULSE)	
C124	VE-30007308	CER CAP.	220PF 1KV K (PULSE)	
C126	VE-30007308	CER CAP.	220PF 1KV K (PULSE)	
C127	VE-30000406	EL CAP.	47UF 250V M (HR)	
C130	VE-30000295	CER CAP.	100NF 50V Z F	
C137	VE-30000383	EL CAP.	220UF 25V M	
C138	VE-30000383	EL CAP.	220UF 25V M	
C14	VE-30000436	CER CAP.	10NF 1KV ZE	
C142	VE-30000295	CER CAP.	100NF 50V Z F	
C143	VE-30000359	EL CAP.	100UF 16V M	
C144	VE-30000360	EL CAP.	100UF 25V M	
C147	VE-30000375	EL CAP.	220UF 16V M	
C149	VE-30000375	EL CAP.	220UF 16V M	
C15	VE-30000436	CER CAP.	10NF 1KV ZE	
C150	VE-30000375	EL CAP.	220UF 16V M	
C152	VE-30000295	CER CAP.	100NF 50V Z F	
C153	VE-30000295	CER CAP.	100NF 50V Z F	
C155	VE-30007308	CER CAP.	220PF 1KV K (PULSE)	
C16	VE-30000436	CER CAP.	10NF 1KV ZE	
C164	VE-30000411	EL CAP.	470UF 16V M	
C166	VE-30000438	CER CAP.	2.2NF 2KV	
C167	VE-30007708	CER CAP.	1NF 1KV K (PULSE)	
C17	VE-30000433	CER CAP.	1NF 1KV M B	
C173	VE-30000367	EL CAP.	1UF 250V M	
△ C180	VE-30000076	MKT CAP.	100NF AC275V M	
△ C119	VE-30000440	CER CAP.	2.2NF 4KV M	
△ C181	VE-30000440	CER CAP.	2.2NF 4KV M	
C19	VE-30000335	CER CAP.	47NF 50V Z F	
C217	VE-30000355	EL CAP.	100UF 50V M	
C219	VE-30000345	EL CAP.	10UF 50V M	
C22	VE-30000290	CER CAP.	10NF 50V Z F	
C23	VE-30000146	MKT CAP.	220NF 250V M	
C255	VE-30010571	EL CAP.	10UF 16V M	
C257	VE-30000109	MKT CAP.	470NF 63V J	
C260	VE-30000074	MKT CAP.	100NF 63V J	
C262	VE-30000384	EL CAP.	2.2UF 50V M	
C265	VE-30000283	CER CAP.	1NF 50V K B	
C275	VE-30000362	EL CAP.	1UF 50V M	
C283	VE-30000384	EL CAP.	2.2UF 50V M	
C323	VE-30010571	EL CAP.	10UF 16V M	
C326	VE-30000298	CER CAP.	1.5NF 50V K B	
C355	VE-30000106	MKT CAP.	47NF 100V J	
C356	VE-30000407	EL CAP.	470UF 16V M	
C368	VE-30000330	CER CAP.	4.7NF 50V K B	
C516	VE-30000345	EL CAP.	10UF 50V M	
C532	VE-30000400	EL CAP.	47UF 50V M	
C533	VE-30000400	EL CAP.	47UF 50V M	
C535	VE-30000400	EL CAP.	47UF 50V M	
C536	VE-30000400	EL CAP.	47UF 50V M	
C600	VE-30000360	EL CAP.	100UF 25V M	
C601	VE-30000075	MKT CAP.	100NF 250V K (DC)	
C603	VE-30000351	EL CAP.	10UF 350V M	
C604	VE-30000075	MKT CAP.	100NF 250V K (DC)	
C605	VE-30000409	EL CAP.	470UF 25V M	
C606	VE-30000071	MKT CAP.	10NF 63V J	
C607	VE-30000402	EL CAP.	47UF 100V M	
C608	VE-30000406	EL CAP.	47UF 250V M (HR)	
C611	VE-30000151	MKT CAP.	3.3NF 2KV %3.5	
C612	VE-30000131	MKT CAP.	100NF 250V J	
C615	VE-30000134	MKT CAP.	11NF 2000V %3.5	
C616	VE-30000137	MKT CAP.	15NF 630V J	
C617	VE-30000172	MKT CAP.	680NF 250V J (P=15)	
C618	VE-30000172	MKT CAP.	680NF 250V J (P=15)	

## [ AV29BF10ENS ]

Symbol No.	Part No.	Part Name	Description
<b>CAPACITOR</b>			
C621	VE-30000360	EL. CAP.	1000UF 25V M
C623	VE-30000296	CER. CAP.	100NF 100V Z F
C635	VE-30000350	EL. CAP.	10UF 250V M
C636	VE-30000444	CER. CAP.	470PF 1KV KB
C637	VE-30000444	CER. CAP.	470PF 1KV KB
C638	VE-30000287	CER. CAP.	10NF 50V K B
C639	VE-30000365	EL. CAP.	1UF 160V M
C640	VE-30000197	CER. CAP.	120PF 50V J SL
C642	VE-30000316	CER. CAP.	220NF 25V Z F
C643	VE-30000074	MKT. CAP.	100NF 63V J
C644	VE-30000074	MKT. CAP.	100NF 63V J
C701	VE-30000345	EL. CAP.	10UF 50V M
C711	VE-30000407	EL. CAP.	470UF 16V M
C740	VE-30000393	EL. CAP.	3.3UF 50V M
C741	VE-30000345	EL. CAP.	10UF 50V M
C742	VE-30000345	EL. CAP.	10UF 50V M
C744	VE-30000345	EL. CAP.	10UF 50V M
C749	VE-30000345	EL. CAP.	10UF 50V M
C760	VE-30000393	EL. CAP.	3.3UF 50V M
C762	VE-30000362	EL. CAP.	1UF 50V M
C763	VE-30000362	EL. CAP.	1UF 50V M
C764	VE-30000074	MKT. CAP.	100NF 63V J
C767	VE-30000409	EL. CAP.	470UF 25V M
C768	VE-30000074	MKT. CAP.	100NF 63V J
C770	VE-30000409	EL. CAP.	470UF 25V M
C776	VE-30000371	EL. CAP.	22UF 50V M
C780	VE-30000371	EL. CAP.	22UF 50V M
C863	VE-30009208	CER. CAP.	470PF 1KV K (PULSE)
C865	VE-30000283	CER. CAP.	1NF 50V K B
C866	VE-30000407	EL. CAP.	470UF 16V M

**TRANSF**

△ TR101	VE-30016154	SMPS TRF
TR600	VE-30002090	LINE DRIVER
△ TR601	VE-30014072	FBT TRF

**COIL**

L1	VE-30015576	TRF DFOCUS COIL	50HZ E25
△ L102	VE-30015617	TRF PFC	200UH
L200	VE-30001979	FIXED COIL	1UH Q45 M-A
L201	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L202	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L212	VE-30001992	FIXED COIL	10UH Q65 K-A
L225	VE-30013413	FERRITE BEAD	
L226	VE-30013413	FERRITE BEAD	
L227	VE-30013413	FERRITE BEAD	
L228	VE-30013413	FERRITE BEAD	
L507	VE-30001987	FIXED COIL	4.7UH Q70 K-A
L600	VE-30002031	FIXED COIL	INJECTION 15MH
L601	VE-30002028	FIXED COIL	BRIDGE 1.9MH
L603	VE-30007771	FIXED COIL	100UH
L700	VE-30001996	FIXED COIL	22UH Q40 K
L701	VE-30001996	FIXED COIL	22UH Q40 K
L702	VE-30001996	FIXED COIL	22UH Q40 K
L704	VE-30001996	FIXED COIL	22UH Q40 K
L708	VE-30001996	FIXED COIL	22UH Q40 K
L715	VE-30001996	FIXED COIL	22UH Q40 K

**DIODE**

D10	VE-30001291	DIODE
D105	VE-30001284	DIODE
D11	VE-30001291	DIODE
D117	VE-30001315	DIODE
D118	VE-30009366	DIODE
D119	VE-30001333	DIODE
D128	VE-30001284	DIODE
D129	VE-30001318	DIODE
D131	VE-30001284	DIODE
△ D132	VE-30007758	BRI DGE DIODE
D136	VE-30001368	ZENER DIODE
D140	VE-30001318	DIODE
D141	VE-30001318	DIODE
D209	VE-30001284	DIODE

Symbol No.	Part No.	Part Name	Description
<b>DIODE</b>			
D600	VE-30001318	DIODE	
D601	VE-30001318	DIODE	
D603	VE-30001299	DIODE	
D604	VE-30001299	DIODE	
D607	VE-30001284	DIODE	
D608	VE-30001284	DIODE	
D609	VE-30001284	DIODE	
D610	VE-30001318	DIODE	
D611	VE-30007681	DIODE	
D612	VE-30007678	DIODE	
D615	VE-30001377	ZENER DIODE	
D622	VE-30001318	DIODE	
D7	VE-30001291	DIODE	
D8	VE-30001291	DIODE	
D9	VE-30001291	DIODE	

**TRANSISTOR**

Q100	VE-30001386	TR
Q101	VE-30001454	TR
Q102	VE-30016755	TR
Q103	VE-30001454	TR
Q105	VE-30001454	TR
Q106	VE-30001428	TR
Q107	VE-30001384	TR
Q4	VE-30006693	TR
Q600	VE-30001435	TR
Q604	VE-30001429	TR
Q605	VE-30001455	TR

**IC**

△ IC100	VE-30015087	IC
IC101	VE-30001668	IC
IC102	VE-30001622	IC
IC103	VE-30001500	IC
IC106	VE-30011968	IC
IC107	VE-30011970	IC
IC116	VE-30001506	IC
IC200	VE-30012090	IC
IC201	VE-30001619	IC
IC203	VE-30013685	IC
IC500	VE-30011957	IC
IC502	VE-20082263	IC
IC503	VE-30001665	IC
IC600	VE-30007793	IC
IC601	VE-30001506	IC
IC700	VE-30001664	IC
IC701	VE-30007794	IC

(MYCOM)  
(MEMORY)**OTHERS**

CON10	VE-30001891	RCA JACK
CON10	VE-30001892	RCA JACK
CON10	VE-30001893	RCA JACK
CON10	VE-30001900	HEADPHONE JACK
△ F100	VE-20000849	FUSE
△ J118	VE-30001244	FUSE RES.
J203	VE-30006712	FERRITE BEAD
△ L107	VE-30002104	LINE FILTER
△ L108	VE-30002104	LINE FILTER
L602	VE-30015221	LINEARITY COIL
△ PL101	VE-30001792	CONN. MALE 2P MOLEX
RL100	VE-30002183	RELAY
△ TH100	VE-30001270	PTC
TU200	VE-30009637	TUNER
X500	VE-30006662	XTAL
X700	VE-30001756	XTAL
Z200	VE-30013163	SAW FILTER
Z201	VE-30014261	SAW FILTER

3.15A

## [ AV29BF10ENS ]

## CRT SOCKET PWB BOARD ASSY (VE-20062535)

△ Symbol No.	Part No.	Part Name	Description
<b>RESISTOR</b>			
R900	VE-30000788	CF RES.	1/4W 6.8M J
R906	VE-30000535	CF RES.	1/2W 150K J
R909	VE-30000525	CF RES.	1/2W 1.5K J
R910	VE-30000525	CF RES.	1/2W 1.5K J
R911	VE-30001125	MO RES.	2W 2.2K J
R913	VE-30000525	CF RES.	1/2W 1.5K J
R914	VE-30001084	MO RES.	1W 1K J
R915	VE-30000580	CF RES.	1/4W 22R J
R916	VE-30001170	MO RES.	1W 4.7K J
△ R917	VE-30001230	FUSE RES.	1/2W 27R J
R921	VE-30000599	CF RES.	1/4W 220K J
R922	VE-30000590	CF RES.	1/4W 2.2K J

**CAPACITOR**

C902	VE-30000415	EL CAP.	4.7UF 250V M
C905	VE-30000234	CER CAP.	270PF 50V J SL
C909	VE-30000385	EL CAP.	2.2UF 250V M

**DIODE**

D901	VE-30001329	DIODE	
D903	VE-30001329	DIODE	
D904	VE-30001329	DIODE	
D909	VE-30001344	ZENER DIODE	

**TRANSISTOR**

Q900	VE-30001427	TR	
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**IC**

IC900	VE-30008721	IC	
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**OTHERS**

△ PL900	VE-30001856	CRT SOCKET	
SG900	VE-30000428	SPARK GAP	
SG901	VE-30000428	SPARK GAP	
SG902	VE-30000428	SPARK GAP	
SG903	VE-30000428	SPARK GAP	
SG904	VE-30000428	SPARK GAP	

## FRONT CONTROL PW BOARD ASSY(VE-20083267)

△ Symbol No.	Part No.	Part Name	Description
<b>OTHERS</b>			
LD102	VE-30001279	LED	RED/GREEN
MD101	VE-30001670	PREAMPLIFIER	
S101	VE-30002181	SWITCH TACT	
S102	VE-30002181	SWITCH TACT	
S103	VE-30002181	SWITCH TACT	
S104	VE-30002181	SWITCH TACT	
S105	VE-30002181	SWITCH TACT	

## FRONT AV + HEADPHONE JACK PW BOARD ASSY (VE-20083088)

△ Symbol No.	Part No.	Part Name	Description
<b>RESISTOR</b>			
R107	VE-30000594	CF RES.	1/4W 22K J
R108	VE-30000982	MF RES.	1/4W 4.7K J
R109	VE-30000594	CF RES.	1/4W 22K J
R110	VE-30000452	CF RES.	1/4W 10R J
R113	VE-30000744	CF RES.	1/4W 560R J
R114	VE-30000744	CF RES.	1/4W 560R J
R116	VE-30001159	MO RES.	1W 0.33R J

**CAPACITOR**

△ C103	VE-30000213	CER CAP.	180PF 50V J OH
△ C104	VE-30000213	CER CAP.	180PF 50V J OH
△ C106	VE-30000190	CER CAP.	100PF 50V J OH

**COIL**

L104	VE-30010964	FERRITE BEAD	
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**OTHERS**

T103	VE-30001962	FERRITE	
T104	VE-30001963	FERRITE	
T107	VE-30001963	FERRITE	

# PRINTED WIRING BOARD PARTS LIST

[ AV29BF10EPS ]

## MAIN P.W. BOARD ASS'Y (VE-20083311)

△ Symbol No.	Part No.	Part Name	Description
<b>RESISTOR</b>			
R100	VE-30001259	WW RES.	5W 1R J
R102	VE-30001132	MO RES.	2W 0.22R J
R106	VE-30000767	CF RES.	1/4W 68R J
R109	VE-30000913	MF RES.	1/4W 2K J
R111	VE-30000718	CF RES.	1/4W 4.7K J
R114	VE-30000729	CF RES.	1/4W 470K J
△ R118	VE-30001257	MG RES.	1/2W 4.7M J
R128	VE-30000513	CF RES.	1/4W 130K J
R131	VE-30000770	CF RES.	1/4W 680R J
R132	VE-30000770	CF RES.	1/4W 680R J
R14	VE-30000481	CF RES.	1/4W 1M J
R142	VE-30000536	CF RES.	1/4W 150K J
R144	VE-30006758	MO RES.	1W 0.82R J
R145	VE-30000477	CF RES.	1/4W 100K J
R152	VE-30001132	MO RES.	2W 0.22R J
R153	VE-30001174	MO RES.	2W 0.47R J
R157	VE-30000712	CF RES.	1/4W 470R J
R161	VE-30006755	MO RES.	2W 4.7R J
R17	VE-30000660	CF RES.	1/4W 3.3K J
R236	VE-30000792	CF RES.	1/4W 75R J
R294	VE-30000554	CF RES.	1/4W 180R J
R300	VE-30000583	CF RES.	1/4W 220R J
R302	VE-30000583	CF RES.	1/4W 220R J
R303	VE-30000655	CF RES.	1/4W 330R J
R304	VE-30000655	CF RES.	1/4W 330R J
R329	VE-30000460	CF RES.	1/4W 100R G
R332	VE-30000471	CF RES.	1/4W 10K J
R344	VE-30000723	CF RES.	1/4W 47K J
R365	VE-30000748	CF RES.	1/4W 5.6K J
R366	VE-30000760	CF RES.	1/4W 6.2K J
R369	VE-30000775	CF RES.	1/4W 6.8K J
R405	VE-30000452	CF RES.	1/4W 10R J
R411	VE-30000452	CF RES.	1/4W 10R J
R432	VE-30000541	CF RES.	1/4W 1.5M J
R500	VE-30000500	CF RES.	1/4W 12K J
R516	VE-30000531	CF RES.	1/4W 15K J
R537	VE-30000560	CF RES.	1/4W 1.8K J
R538	VE-30000560	CF RES.	1/4W 1.8K J
R570	VE-30000633	CF RES.	1/4W 27K J
R571	VE-30000752	CF RES.	1/4W 56K J
R574	VE-30000706	CF RES.	1/4W 47R J
R601	VE-30001138	MO RES.	1W 2.7K J
R603	VE-30001138	MO RES.	1W 2.7K J
△ R604	VE-30001244	FUSE RES.	1/2W 0.47R J
R605	VE-30000628	CF RES.	1/4W 2.7K J
△ R606	VE-30001244	FUSE RES.	1/2W 0.47R J
R607	VE-30000554	CF RES.	1/4W 180R J
△ R612	VE-30001232	FUSE RES.	1/4W 2.7R J
R614	VE-30015721	MO RES.	5W 2.2K J
R615	VE-30000848	MF RES.	1/4W 1K F
△ R617	VE-30001215	FUSE RES.	1W 1R J
R623	VE-30001134	MO RES.	2W 2.2R J
R625	VE-30001162	MO RES.	1W 390R J
R627	VE-30001088	MO RES.	1W 1R J
△ R651	VE-30001245	FUSE RES.	1/4W 0.47R J
△ R652	VE-30001245	FUSE RES.	1/4W 0.47R J
R657	VE-30000993	MF RES.	1/4W 51K J
R658	VE-30007202	MF RES.	1/4W 56K F
R659	VE-30000865	MF RES.	1/4W 1.2K J
R670	VE-30015721	MO RES.	5W 2.2K J
R7	VE-30001155	MO RES.	2W 33K J
R709	VE-30000466	CF RES.	1/4W 1K J
R711	VE-30000459	CF RES.	1/4W 100R J
R712	VE-30000466	CF RES.	1/4W 1K J
R713	VE-30000466	CF RES.	1/4W 1K J
R714	VE-30000466	CF RES.	1/4W 1K J
R719	VE-30000734	CF RES.	1/4W 4.7R J
R720	VE-30000734	CF RES.	1/4W 4.7R J
R748	VE-30000670	CF RES.	1/4W 330K J
R8	VE-30001155	MO RES.	2W 33K J

## CAPACITOR

△ C100	VE-30000094	MKT CAP.	220NF AC275V M
△ C101	VE-30007858	MKT CAP.	470NF AC275V M (P=22.5MM)
△ C105	VE-30000153	MKT CAP.	330NF 400V J
C107	VE-30000353	EL CAP.	100UF 25V M

△ Symbol No.	Part No.	Part Name	Description
<b>CAPACITOR</b>			
C11	VE-30006748	EL CAP.	4.7UF 350V M
C110	VE-30000387	EL CAP.	33UF 50V M
C111	VE-30000266	CER CAP.	560PF 50V J SL
C114	VE-30000161	MKT CAP.	47NF 630V J
C115	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C116	VE-30013690	EL CAP.	220UF 450V M 105° C
C117	VE-30006940	CER CAP.	2.7NF 1KV K B
C118	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C119	VE-30000440	CER CAP.	2.2NF 4KV M
C12	VE-30006748	EL CAP.	4.7UF 350V M
C122	VE-30000071	MKT CAP.	10NF 63V J
C123	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C124	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C126	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C127	VE-30000406	EL CAP.	47UF 250V M (HR)
C130	VE-30000295	CER CAP.	100NF 50V Z F
C137	VE-30000383	EL CAP.	220UF 25V M
C138	VE-30000383	EL CAP.	220UF 25V M
C14	VE-30000436	CER CAP.	10NF 1KV ZE
C142	VE-30000295	CER CAP.	100NF 50V Z F
C143	VE-30000359	EL CAP.	100UF 16V M
C144	VE-30000360	EL CAP.	100UF 25V M
C147	VE-30000375	EL CAP.	220UF 16V M
C148	VE-30000400	EL CAP.	47UF 50V M
C149	VE-30000375	EL CAP.	220UF 16V M
C15	VE-30000436	CER CAP.	10NF 1KV ZE
C150	VE-30000375	EL CAP.	220UF 16V M
C152	VE-30000295	CER CAP.	100NF 50V Z F
C153	VE-30000295	CER CAP.	100NF 50V Z F
C155	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C16	VE-30000436	CER CAP.	10NF 1KV ZE
C164	VE-30000411	EL CAP.	470UF 16V M
C173	VE-30000367	EL CAP.	1UF 250V M
△ C180	VE-30000076	MKT CAP.	100NF AC275V M
△ C119	VE-30000440	CER CAP.	2.2NF 4KV M
△ C181	VE-30000440	CER CAP.	2.2NF 4KV M
C182	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
C19	VE-30000335	CER CAP.	47NF 50V Z F
C217	VE-30000355	EL CAP.	100UF 50V M
C219	VE-30000345	EL CAP.	10UF 50V M
C22	VE-30000290	CER CAP.	10NF 50V Z F
C23	VE-30000146	MKT CAP.	220NF 250V M
C255	VE-30010571	EL CAP.	10UF 16V M
C262	VE-30000384	EL CAP.	2.2UF 50V M
C265	VE-30000283	CER CAP.	1NF 50V K B
C274	VE-30000352	EL CAP.	100UF 16V M
C275	VE-30000362	EL CAP.	1UF 50V M
C280	VE-30000092	MKT CAP.	220NF 63V J
C283	VE-30000384	EL CAP.	2.2UF 50V M
C285	VE-30000092	MKT CAP.	220NF 63V J
C306	VE-30000352	EL CAP.	100UF 16V M
C323	VE-30010571	EL CAP.	10UF 16V M
C326	VE-30000298	CER CAP.	1.5NF 50V K B
C355	VE-30000106	MKT CAP.	47NF 100V J
C356	VE-30000407	EL CAP.	470UF 16V M
C363	VE-30000352	EL CAP.	100UF 16V M
C364	VE-30000352	EL CAP.	100UF 16V M
C365	VE-30000352	EL CAP.	100UF 16V M
C502	VE-30000074	MKT CAP.	100NF 63V J
C516	VE-30000345	EL CAP.	10UF 50V M
C520	VE-30000352	EL CAP.	100UF 16V M
C534	VE-30000109	MKT CAP.	470NF 63V J
C540	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
C600	VE-30000360	EL CAP.	100UF 25V M
C603	VE-30000351	EL CAP.	10UF 350V M
C605	VE-30000409	EL CAP.	470UF 25V M
C606	VE-30000071	MKT CAP.	10NF 63V J
C607	VE-30000402	EL CAP.	47UF 100V M
C608	VE-30000406	EL CAP.	47UF 250V M (HR)
C611	VE-30000151	MKT CAP.	3.3NF 2KV 3.5
C612	VE-30000131	MKT CAP.	100NF 250V J
C615	VE-30000134	MKT CAP.	11NF 2000V 3.5
C616	VE-30000137	MKT CAP.	15NF 630V J
C617	VE-30000172	MKT CAP.	680NF 250V J (P=15)
C618	VE-30000172	MKT CAP.	680NF 250V J (P=15)
C621	VE-30000360	EL CAP.	100UF 25V M
C623	VE-30000296	CER CAP.	100NF 100V Z F
C626	VE-30000092	MKT CAP.	220NF 63V J

## [ AV29BF10EPS ]

Symbol	No.	Part No.	Part Name	Description
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## CAPACITOR

C635	VE-30000350	EL. CAP.	10UF 250V M
C636	VE-30000444	CER. CAP.	470PF 1KV KB
C637	VE-30000444	CER. CAP.	470PF 1KV KB
C638	VE-30000287	CER. CAP.	10NF 50V K B
C639	VE-30000365	EL. CAP.	1UF 160V M
C640	VE-30000197	CER. CAP.	120PF 50V J SL
C642	VE-30000316	CER. CAP.	220NF 25V Z F
C700	VE-30000352	EL. CAP.	100UF 16V M
C701	VE-30000345	EL. CAP.	100UF 50V M
C711	VE-30000407	EL. CAP.	470UF 16V M
C740	VE-30000393	EL. CAP.	3.3UF 50V M
C741	VE-30000345	EL. CAP.	10UF 50V M
C742	VE-30000345	EL. CAP.	10UF 50V M
C744	VE-30000345	EL. CAP.	10UF 50V M
C749	VE-30000345	EL. CAP.	10UF 50V M
C759	VE-30000352	EL. CAP.	100UF 16V M
C760	VE-30000393	EL. CAP.	3.3UF 50V M
C762	VE-30000362	EL. CAP.	1UF 50V M
C763	VE-30000362	EL. CAP.	1UF 50V M
C767	VE-30000409	EL. CAP.	470UF 25V M
C770	VE-30000409	EL. CAP.	470UF 25V M
C776	VE-30000371	EL. CAP.	22UF 50V M
C780	VE-30000371	EL. CAP.	22UF 50V M
C863	VE-30009208	CER. CAP.	470PF 1KV K (PULSE)
C865	VE-30000283	CER. CAP.	1NF 50V K B
C866	VE-30000407	EL. CAP.	470UF 16V M
C900	VE-30000075	MKT. CAP.	100NF 250V K (DC)
C901	VE-30000433	CER. CAP.	1NF 1KV M B
C903	VE-30000438	CER. CAP.	2.2NF 2KV
C907	VE-30000075	MKT. CAP.	100NF 250V K (DC)

## TRANSF

TR101	VE-30016154	SMPS TRF
TR600	VE-30002090	LINE DRIVER
TR601	VE-30014072	FBT TRF

## COIL

L1	VE-30015576	TRF. FOCUS COIL	50HZ E25
L102	VE-30015617	TRF. PFC	200UH
L103	VE-30001996	FIXED COIL	22UH Q40 K
L103	VE-30010964	FERRITE BEAD	
L200	VE-30001979	FIXED COIL	1UH Q45 M-A
L201	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L202	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L212	VE-30001992	FIXED COIL	10UH Q65 K-A
L225	VE-30013413	FERRITE BEAD	
L226	VE-30013413	FERRITE BEAD	
L227	VE-30013413	FERRITE BEAD	
L228	VE-30013413	FERRITE BEAD	
L507	VE-30001987	FIXED COIL	4.7UH Q70 K-A
L600	VE-30002031	FIXED COIL	INJECTION 15MH
L601	VE-30002028	FIXED COIL	BRIDGE 1.9MH
L603	VE-30007771	FIXED COIL	100UH

## DIODE

D10	VE-30001291	DIODE
D106	VE-30001284	DIODE
D11	VE-30001291	DIODE
D118	VE-30009366	DIODE
D119	VE-30001333	DIODE
D123	VE-30001344	ZENER DIODE
D127	VE-30001315	DIODE
D129	VE-30001318	DIODE
D132	VE-30007758	BRIDGE DIODE
D133	VE-30001315	DIODE
D136	VE-30001368	ZENER DIODE
D139	VE-30001284	DIODE
D140	VE-30001318	DIODE
D141	VE-30001318	DIODE
D600	VE-30001318	DIODE
D601	VE-30001318	DIODE
D603	VE-30001299	DIODE
D604	VE-30001299	DIODE
D610	VE-30001318	DIODE
D612	VE-30007678	DIODE
D615	VE-30001377	ZENER DIODE

Symbol	No.	Part No.	Part Name	Description
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## DIODE

D622	VE-30001318	DIODE
D7	VE-30001291	DIODE
D8	VE-30001291	DIODE
D9	VE-30001291	DIODE

## TRANSISTOR

Q100	VE-30001386	TR
Q102	VE-30016755	TR
Q106	VE-30001428	TR
Q107	VE-30001384	TR
Q3	VE-30001454	TR
Q4	VE-30006693	TR
Q600	VE-30001435	TR
Q604	VE-30001429	TR
Q605	VE-30001455	TR

## IC

IC100	VE-30015087	IC
IC101	VE-30001668	IC
IC102	VE-30001622	IC
IC103	VE-30001500	IC
IC106	VE-30011968	IC
IC107	VE-30011970	IC
IC116	VE-30001506	IC
IC200	VE-30012090	IC
IC201	VE-30001619	IC
IC203	VE-30013685	IC
IC500	VE-30011957	IC
IC502	VE-20083332	IC
IC503	VE-30001665	IC
IC600	VE-30007793	IC
IC601	VE-30001506	IC
IC700	VE-30001664	IC
IC701	VE-30007794	IC

(MYCOM)  
(SERVICE)

## OTHERS

CON10	VE-30001891	RCA JACK
CON10	VE-30001892	RCA JACK
CON10	VE-30001893	RCA JACK
CON10	VE-30001900	HEADPHONE JACK
F100	VE-20000849	FUSE
J118	VE-30001244	FUSE RES.
J203	VE-30006712	FERRITE BEAD
L107	VE-30002104	LINE FILTER
L108	VE-30002104	LINE FILTER
L602	VE-30015221	LINEARITY COIL
PL101	VE-30001792	CONN. MALE 2P MOLEX
RL100	VE-30002183	RELAY
TH100	VE-30001270	PTC
TU200	VE-30009637	TUNER
X500	VE-30006662	XTAL
X700	VE-30001756	XTAL
Z200	VE-30012545	SAW FILTER
Z201	VE-30001692	SAW FILTER

## CRT SOCKET P.W. BOARD ASS'Y (VE-20062535)

Refer to PARTS LIST in page 22 for this P.W. board.

FRONT CONTROL P.W. BOARD ASS'Y  
(VE-20083267)

Refer to PARTS LIST in page 22 for this P.W. board.

FRONT AV + HEADPHONE JACK P.W. BOARD  
ASS'Y (VE-20083088)

Refer to PARTS LIST in page 22 for this P.W. board.

# PRINTED WIRING BOARD PARTS LIST

[ AV29BF10EES ]

## MAIN P.W. BOARD ASS'Y (VE-20082155)

△ Symbol No.	Part No.	Part Name	Description
<b>RESISTOR</b>			
R100	VE-30001259	WW RES.	5W 1R J
R102	VE-30001132	MO RES.	2W 0.22R J
R106	VE-30000767	CF RES.	1/4W 68R J
R109	VE-30000913	MF RES.	1/4W 2K J
R113	VE-30000471	CF RES.	1/4W 10K J
R114	VE-30000729	CF RES.	1/4W 470K J
△ R118	VE-30001257	MG RES.	1/2W 4.7M J
R122	VE-30000459	CF RES.	1/4W 100R J
R128	VE-30000513	CF RES.	1/4W 130K J
R13	VE-30000633	CF RES.	1/4W 27K J
R130	VE-30000471	CF RES.	1/4W 10K J
R131	VE-30000770	CF RES.	1/4W 680R J
R132	VE-30000770	CF RES.	1/4W 680R J
R14	VE-30000481	CF RES.	1/4W 1M J
R142	VE-30000536	CF RES.	1/4W 150K J
R144	VE-30006758	MO RES.	1W 0.82R J
R15	VE-30000541	CF RES.	1/4W 1.5M J
R152	VE-30001132	MO RES.	2W 0.22R J
R153	VE-30001174	MO RES.	2W 0.47R J
R157	VE-30000712	CF RES.	1/4W 470R J
R161	VE-30006755	MO RES.	2W 4.7R J
R17	VE-30000660	CF RES.	1/4W 3.3K J
R206	VE-30000459	CF RES.	1/4W 100R J
R207	VE-30000459	CF RES.	1/4W 100R J
R236	VE-30000792	CF RES.	1/4W 75R J
R279	VE-30000471	CF RES.	1/4W 10K J
R294	VE-30000554	CF RES.	1/4W 180R J
R298	VE-30000471	CF RES.	1/4W 10K J
R300	VE-30000583	CF RES.	1/4W 220R J
R302	VE-30000583	CF RES.	1/4W 220R J
R303	VE-30000655	CF RES.	1/4W 330R J
R304	VE-30000655	CF RES.	1/4W 330R J
R309	VE-30000459	CF RES.	1/4W 100R J
R329	VE-30000460	CF RES.	1/4W 100R G
R331	VE-30000459	CF RES.	1/4W 100R J
R335	VE-30000459	CF RES.	1/4W 100R J
R344	VE-30000723	CF RES.	1/4W 47K J
R365	VE-30000748	CF RES.	1/4W 5.6K J
R366	VE-30000760	CF RES.	1/4W 6.2K J
R369	VE-30000775	CF RES.	1/4W 6.8K J
R405	VE-30000452	CF RES.	1/4W 10R J
R411	VE-30000452	CF RES.	1/4W 10R J
R500	VE-30000500	CF RES.	1/4W 12K J
R501	VE-30000471	CF RES.	1/4W 10K J
R505	VE-30000471	CF RES.	1/4W 10K J
R506	VE-30000471	CF RES.	1/4W 10K J
R513	VE-30000471	CF RES.	1/4W 10K J
R516	VE-30000531	CF RES.	1/4W 15K J
R530	VE-30000718	CF RES.	1/4W 4.7K J
R537	VE-30000560	CF RES.	1/4W 1.8K J
R538	VE-30000560	CF RES.	1/4W 1.8K J
R560	VE-30000459	CF RES.	1/4W 100R J
R561	VE-30000459	CF RES.	1/4W 100R J
R571	VE-30000752	CF RES.	1/4W 56K J
R574	VE-30000706	CF RES.	1/4W 47R J
R600	VE-30000459	CF RES.	1/4W 100R J
R601	VE-30001138	MO RES.	1W 2.7K J
R603	VE-30001138	MO RES.	1W 2.7K J
△ R604	VE-30001244	FUSE RES.	1/2W 0.47R J
R605	VE-30000628	CF RES.	1/4W 2.7K J
△ R606	VE-30001244	FUSE RES.	1/2W 0.47R J
R607	VE-30000554	CF RES.	1/4W 180R J
R611	VE-30000471	CF RES.	1/4W 10K J
△ R612	VE-30001232	FUSE RES.	1/4W 2.7R J
R614	VE-30015721	MO RES.	5W 2.2K J
R615	VE-30000848	MF RES.	1/4W 1K F
△ R617	VE-30001215	FUSE RES.	1W 1R J
R623	VE-30001134	MO RES.	2W 2.2R J
R625	VE-30001162	MO RES.	1W 390R J
R626	VE-30000471	CF RES.	1/4W 10K J
R627	VE-30001088	MO RES.	1W 1R J
R629	VE-30000471	CF RES.	1/4W 10K J
△ R651	VE-30001245	FUSE RES.	1/4W 0.47R J
△ R652	VE-30001245	FUSE RES.	1/4W 0.47R J
R657	VE-30000993	MF RES.	1/4W 51K J
R658	VE-30007202	MF RES.	1/4W 56K F
R659	VE-30000865	MF RES.	1/4W 1.2K J
R670	VE-30015721	MO RES.	5W 2.2K J

△ Symbol No.	Part No.	Part Name	Description
<b>RESISTOR</b>			
R7	VE-30001155	MO RES.	2W 33K J
R705	VE-30000459	CF RES.	1/4W 100R J
R709	VE-30000466	CF RES.	1/4W 1K J
R712	VE-30000466	CF RES.	1/4W 1K J
R713	VE-30000466	CF RES.	1/4W 1K J
R714	VE-30000466	CF RES.	1/4W 1K J
R719	VE-30000734	CF RES.	1/4W 4.7R J
R720	VE-30000734	CF RES.	1/4W 4.7R J
R748	VE-30000670	CF RES.	1/4W 330K J
R8	VE-30001155	MO RES.	2W 33K J
R907	VE-30000477	CF RES.	1/4W 100K J
R908	VE-30000477	CF RES.	1/4W 100K J
R912	VE-30000477	CF RES.	1/4W 100K J

<b>CAPACITOR</b>			
△ C100	VE-30000094	MKT CAP.	220NF AC275V M
△ C101	VE-30007858	MKT CAP.	470NF AC275V M (P=22.5MM)
△ C105	VE-30000153	MKT CAP.	330NF 400V J
C107	VE-30000353	EL CAP.	100UF 25V M
C11	VE-30006748	EL CAP.	4.7UF 350V M
C110	VE-30000387	EL CAP.	33UF 50V M
C111	VE-30000266	CER CAP.	560PF 50V J SL
C112	VE-30000092	MKT CAP.	220NF 63V J
C114	VE-30000161	MKT CAP.	47NF 630V J
C115	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C116	VE-30013690	EL CAP.	220UF 450V M 105° C
C117	VE-30006940	CER CAP.	2.7NF 1KV K B
C118	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C119	VE-30000440	CER CAP.	2.2NF 4KV M
C12	VE-30006748	EL CAP.	4.7UF 350V M
C122	VE-30000071	MKT CAP.	10NF 63V J
C123	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C124	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C126	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C127	VE-30000406	EL CAP.	47UF 250V M (HR)
C130	VE-30000295	CER CAP.	100NF 50V Z F
C137	VE-30000383	EL CAP.	220UF 25V M
C138	VE-30000383	EL CAP.	220UF 25V M
C14	VE-30000436	CER CAP.	10NF 1KV ZE
C142	VE-30000295	CER CAP.	100NF 50V Z F
C143	VE-30000359	EL CAP.	100UF 16V M
C144	VE-30000360	EL CAP.	100UF 25V M
C147	VE-30000375	EL CAP.	220UF 16V M
C149	VE-30000375	EL CAP.	220UF 16V M
C15	VE-30000436	CER CAP.	10NF 1KV ZE
C150	VE-30000375	EL CAP.	220UF 16V M
C152	VE-30000295	CER CAP.	100NF 50V Z F
C153	VE-30000295	CER CAP.	100NF 50V Z F
C155	VE-30007308	CER CAP.	220PF 1KV K (PULSE)
C16	VE-30000436	CER CAP.	10NF 1KV ZE
C164	VE-30000411	EL CAP.	470UF 16V M
C17	VE-30000433	CER CAP.	1NF 1KV M B
C173	VE-30000367	EL CAP.	1UF 250V M
△ C180	VE-30000076	MKT CAP.	100NF AC275V M
△ C119	VE-30000440	CER CAP.	2.2NF 4KV M
△ C181	VE-30000440	CER CAP.	2.2NF 4KV M
C182	VE-30007708	CER CAP.	1NF 1KV K (PULSE)
C217	VE-30000355	EL CAP.	100UF 50V M
C23	VE-30000146	MKT CAP.	220NF 250V M
C255	VE-30010571	EL CAP.	10UF 16V M
C262	VE-30000384	EL CAP.	2.2UF 50V M
C265	VE-30000283	CER CAP.	1NF 50V K B
C274	VE-30000352	EL CAP.	100UF 16V M
C275	VE-30000362	EL CAP.	1UF 50V M
C283	VE-30000384	EL CAP.	2.2UF 50V M
C304	VE-30000345	EL CAP.	10UF 50V M
C306	VE-30000352	EL CAP.	100UF 16V M
C323	VE-30010571	EL CAP.	10UF 16V M
C325	VE-30000345	EL CAP.	10UF 50V M
C326	VE-30000298	CER CAP.	1.5NF 50V K B
C355	VE-30000106	MKT CAP.	47NF 100V J
C356	VE-30000407	EL CAP.	470UF 16V M
C363	VE-30000352	EL CAP.	100UF 16V M
C364	VE-30000352	EL CAP.	100UF 16V M
C365	VE-30000352	EL CAP.	100UF 16V M
C368	VE-30000335	CER CAP.	47NF 50V Z F

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Symbol	No.	Part No.	Part Name	Description
<b>CAPACITOR</b>				
C502		VE-30000074	MKT CAP.	100NF 63V J
C520		VE-30000352	EL CAP.	100UF 16V M
C524		VE-30000290	CER CAP.	10NF 50V Z F
C525		VE-30000290	CER CAP.	10NF 50V Z F
C526		VE-30000290	CER CAP.	10NF 50V Z F
C527		VE-30000290	CER CAP.	10NF 50V Z F
C532		VE-30000400	EL CAP.	47UF 50V M
C533		VE-30000400	EL CAP.	47UF 50V M
C534		VE-30000109	MKT CAP.	470NF 63V J
C535		VE-30000400	EL CAP.	47UF 50V M
C536		VE-30000400	EL CAP.	47UF 50V M
C540		VE-30007708	CER CAP.	1NF 1KV K (PULSE)
C600		VE-30000360	EL CAP.	1000UF 25V M
C601		VE-30000075	MKT CAP.	100NF 250V K (DC)
C603		VE-30000351	EL CAP.	10UF 350V M
C604		VE-30000075	MKT CAP.	100NF 250V K (DC)
C605		VE-30000409	EL CAP.	470UF 25V M
C606		VE-30000071	MKT CAP.	10NF 63V J
C607		VE-30000402	EL CAP.	47UF 100V M
C608		VE-30000406	EL CAP.	47UF 250V M (HR)
C611		VE-30000151	MKP CAP.	3.3NF 2KV %3.5
C612		VE-30000131	MKP CAP.	100NF 250V J
C615		VE-30000134	MKP CAP.	11NF 2000V %3.5
C616		VE-30000137	MKP CAP.	15NF 630V J
C617		VE-30000172	MKP CAP.	680NF 250V J (P=15)
C618		VE-30000172	MKP CAP.	680NF 250V J (P=15)
C621		VE-30000360	EL CAP.	1000UF 25V M
C623		VE-30000296	CER CAP.	100NF 100V Z F
C636		VE-30000444	CER CAP.	470PF 1KV KB
C637		VE-30000444	CER CAP.	470PF 1KV KB
C638		VE-30000287	CER CAP.	10NF 50V K B
C639		VE-30000365	EL CAP.	1UF 160V M
C640		VE-30000197	CER CAP.	120PF 50V J SL
C642		VE-30000316	CER CAP.	220NF 25V Z F
C700		VE-30000352	EL CAP.	100UF 16V M
C711		VE-30000407	EL CAP.	470UF 16V M
C740		VE-30000393	EL CAP.	3.3UF 50V M
C759		VE-30000352	EL CAP.	100UF 16V M
C760		VE-30000393	EL CAP.	3.3UF 50V M
C762		VE-30000362	EL CAP.	1UF 50V M
C763		VE-30000362	EL CAP.	1UF 50V M
C767		VE-30000409	EL CAP.	470UF 25V M
C770		VE-30000409	EL CAP.	470UF 25V M
C776		VE-30000371	EL CAP.	22UF 50V M
C780		VE-30000371	EL CAP.	22UF 50V M
C863		VE-30009208	CER CAP.	470PF 1KV K (PULSE)
C865		VE-30000283	CER CAP.	1NF 50V K B
C866		VE-30000407	EL CAP.	470UF 16V M
C903		VE-30000438	CER CAP.	2.2NF 2KV
C906		VE-30000350	EL CAP.	10UF 250V M

## TRANSF

TR101	VE-30016154	SMPS TRF
TR600	VE-30002090	LINE DRIVER
TR601	VE-30014072	FBT TRF

## COIL

L1	VE-30015576	TRF DFOCUS COIL	50HZ E25
L102	VE-30015617	TRF PFC	200UH
L103	VE-30001996	FIXED COIL	22UH Q40 K
L103	VE-30010964	FERRITE BEAD	
L105	VE-30001992	FIXED COIL	10UH Q65 K-A
L200	VE-30001979	FIXED COIL	1UH Q45 M-A
L201	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L202	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L209	VE-30001992	FIXED COIL	10UH Q65 K-A
L210	VE-30001992	FIXED COIL	10UH Q65 K-A
L225	VE-30013413	FERRITE BEAD	
L226	VE-30013413	FERRITE BEAD	
L227	VE-30013413	FERRITE BEAD	
L228	VE-30013413	FERRITE BEAD	
L500	VE-30001992	FIXED COIL	10UH Q65 K-A
L501	VE-30001992	FIXED COIL	10UH Q65 K-A
L502	VE-30001992	FIXED COIL	10UH Q65 K-A
L503	VE-30001992	FIXED COIL	10UH Q65 K-A
L504	VE-30001992	FIXED COIL	10UH Q65 K-A

Symbol	No.	Part No.	Part Name	Description
<b>COIL</b>				
L507		VE-30001987	FIXED COIL	4.7UH Q70 K-A
L600		VE-30002031	FIXED COIL	INJECTION 15MH
L601		VE-30002028	FIXED COIL	BRIDGE 1.9MH
L603		VE-30007771	FIXED COIL	100UH

## DIODE

D108	VE-30007681	DIODE
D111	VE-30001291	DIODE
D117	VE-30001315	DIODE
D118	VE-30009366	DIODE
D119	VE-30001333	DIODE
D129	VE-30001318	DIODE
D132	VE-30007758	BRIDGE DIODE
D136	VE-30001368	ZENER DIODE
D137	VE-30007681	DIODE
D140	VE-30001318	DIODE
D141	VE-30001318	DIODE
D600	VE-30001318	DIODE
D601	VE-30001318	DIODE
D603	VE-30001299	DIODE
D604	VE-30001299	DIODE
D610	VE-30001318	DIODE
D612	VE-30007678	DIODE
D613	VE-30001291	DIODE
D615	VE-30001377	ZENER DIODE
D622	VE-30001318	DIODE
D905	VE-30001284	DIODE
D906	VE-30001284	DIODE
D907	VE-30001284	DIODE
D908	VE-30001284	DIODE

## TRANSISTOR

Q100	VE-30001386	TR
Q101	VE-30001454	TR
Q102	VE-30016755	TR
Q103	VE-30001454	TR
Q105	VE-30001454	TR
Q106	VE-30001428	TR
Q107	VE-30001384	TR
Q4	VE-30006693	TR
Q600	VE-30001435	TR
Q604	VE-30001429	TR
Q605	VE-30001455	TR

## IC

IC100	VE-30015087	IC
IC101	VE-30001668	IC
IC102	VE-30001622	IC
IC103	VE-30001500	IC
IC106	VE-30011968	IC
IC107	VE-30011970	IC
IC116	VE-30001506	IC
IC200	VE-30012090	IC
IC201	VE-30001619	IC
IC203	VE-30013685	IC
IC500	VE-30011957	IC
IC502	VE-20082153	IC
IC503	VE-30001665	IC
IC600	VE-30007793	IC
IC601	VE-30001506	IC
IC700	VE-30001664	IC
IC701	VE-30007794	IC

(MYCOM)  
(SERVICE)

## OTHERS

CAB90	VE-30000190	CER CAP.	100PF 50V J CH
CON10	VE-30001891	RCA JACK	
CON10	VE-30001892	RCA JACK	
CON10	VE-30001893	RCA JACK	
CON10	VE-30001900	HEADPHONE JACK	
DX906	VE-30000190	CER CAP.	100PF 50V J CH
F100	VE-20000849	FUSE	3.15A
J118	VE-30001244	FUSE RES.	
J203	VE-30006712	FERRITE BEAD	
L107	VE-30002104	LINE FILTER	

Symbol No.	Part No.	Part Name	Description
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**OTHERS**

△ L108	VE-30002104	LINE FILTER	
L602	VE-30015221	LINEARITY COIL	
△ PL101	VE-30001792	CONN MALE 2P MOLEX	
RL100	VE-30002183	RELAY	
△ TH100	VE-30001270	PTC	
TU200	VE-30009637	TUNER	
X500	VE-30006662	XTAL	
X700	VE-30001756	XTAL	
Z200	VE-30012545	SAW FILTER	
Z201	VE-30001692	SAW FILTER	

**CRT SOCKET PW BOARD ASSY (VE-20072781)**

Symbol No.	Part No.	Part Name	Description
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**RESISTOR**

R900	VE-30000788	CF RES.	1/4W 6.8M J
R906	VE-30000535	CF RES.	1/2W 150K J
R909	VE-30000525	CF RES.	1/2W 1.5K J
R910	VE-30000525	CF RES.	1/2W 1.5K J
R911	VE-30001125	MO RES.	2W 2.2K J
R913	VE-30000525	CF RES.	1/2W 1.5K J
R914	VE-30001084	MO RES.	1W 1K J
R915	VE-30000580	CF RES.	1/4W 22R J
R916	VE-30001170	MO RES.	1W 4.7K J
△ R917	VE-30001230	FUSE RES.	1/2W 27R J
R921	VE-30000599	CF RES.	1/4W 220K J
R922	VE-30000590	CF RES.	1/4W 2.2K J

**CAPACITOR**

C902	VE-30000415	EL CAP.	4.7UF 250V M
C905	VE-30000234	CER CAP.	270PF 50V J SL
C909	VE-30000385	EL CAP.	2.2UF 250V M

**DIODE**

D901	VE-30001329	DIODE	
D903	VE-30001329	DIODE	
D904	VE-30001329	DIODE	
D909	VE-30001344	ZENER DIODE	

**TRANSISTOR**

Q900	VE-30001427	TR	
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**IC**

IC900	VE-30008721	IC	
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**OTHERS**

△ PL900	VE-30001855	CRT SOCKET	
SG900	VE-30000428	SPARK GAP	
SG901	VE-30000428	SPARK GAP	
SG902	VE-30000428	SPARK GAP	
SG903	VE-30000428	SPARK GAP	
SG904	VE-30000428	SPARK GAP	

**FRONT CONTROL P.W. BOARD ASS'Y (VE-20083267)**

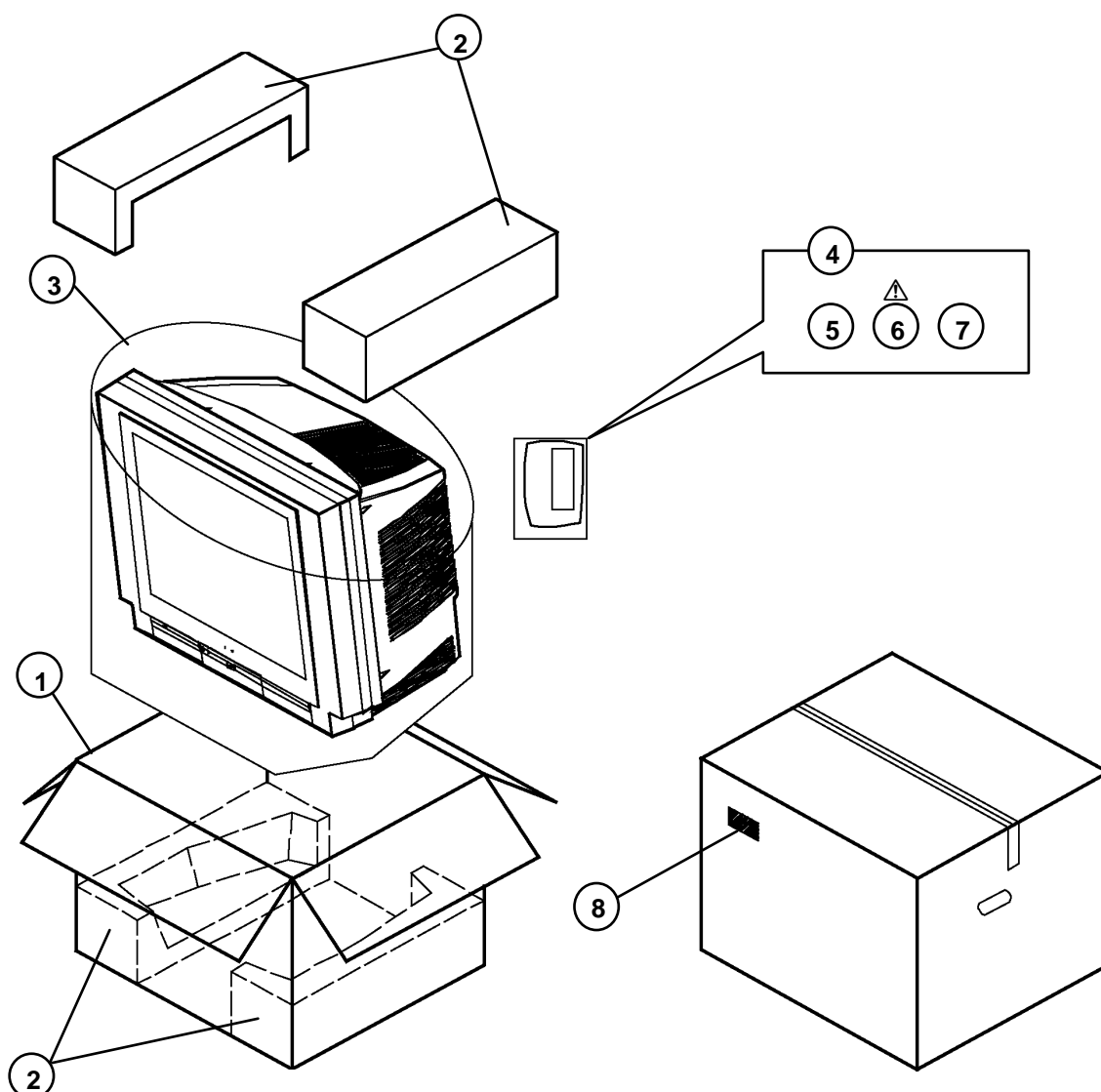
Refer to PARTS LIST in page 22 for this P.W. board.

**FRONT AV + HEADPHONE JACK P.W. BOARD ASS'Y (VE-20083088)**

Refer to PARTS LIST in page 22 for this P.W. board.

AV29BF10ENS  
AV29BF10EPS  
AV29BF10EES

## PACKING



## PACKING PARTS LIST

△ Ref. No.	Part No.	Part Name	Description
1	VE-50022390	F CARTON BOX	(AV29BF10ENS)
1	VE-50022788	F CARTON BOX	(AV29BF10EES)
1	VE-50022790	F CARTON BOX	(AV29BF10EPS)
2	VE-20048248	CUSHION ASS'Y	4 pcs in 1 set
3	VE-50020732	POLY BAG (1400*1000)	
4	VE-70000587	POLY BAG	
5	VE-30015781	REMOTE CONTROL UNIT	(RM-C85)
△ 6	VE-50022402	INST BOOK	(AV29BF10ENS)
△ 6	VE-50022857	INST BOOK	(AV29BF10EES)
△ 6	VE-50022856	INST BOOK	(AV29BF10EPS)
7	BT-54013-2TK	WARRANTY CARD	
8	VE-20084576	LABEL	(AV29BF10ENS)
8	VE-20083465	LABEL	(AV29BF10EES)
8	VE-20083482	LABEL	(AV29BF10EPS)

# JVC

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VP 0203  
DP8080